

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL
RAILROAD AND FINANCIAL NEWSPAPER.

THE AMERICANIZATION OF ENGLAND.

[New York Journal of Finance.]

Much is heard nowadays of the United States as a world-power, of the commercial supremacy of the republic whose centenary was celebrated not so many years ago, of the influence abroad of American institutions, customs and tendencies; and there are those loyal Americans who deprecate such talk, and speak fondly of that splendid isolation which the nation once enjoyed as of a most desirable treasure which has been lost and never can be regained; for it is admitted by both the enthusiasts who look forward to the rapid domination of the world by Americans and the conservatives who shake their heads sadly and predict that the house of cards will one day fall in ruins, that the nation that Washington and Jefferson and Franklin and the other fathers established is no longer merely a law unto itself, but that it has entered upon a career as a world-power from which it cannot turn back. Just as our indomitable creators of trade are no longer content with the home market, but are engaged in a Titanic struggle with the strongest nations of the earth for commercial supremacy, so are Americans in other lines of work reaching out for new worlds to conquer, and we see them succeeding.

It is but a few years, comparatively, since Englishmen, particularly, spoke with contempt of everything American. With what satire did Dickens write of certain foibles and weaknesses which his keen eye detected in our national life. But today it is noticeable that England is rapidly becoming Americanized. It is an American who is to convert the great underground railway system of London into a modern electrical system of traction, but serious writers show that such examples are really of very little moment in comparison with the drift toward American ideas and customs that is taking place in the mother country. The child is in this case revolutionizing the parent. In business, in society, in politics, this influence is seen and "viewed with alarm" by conservative British sires and granddames.

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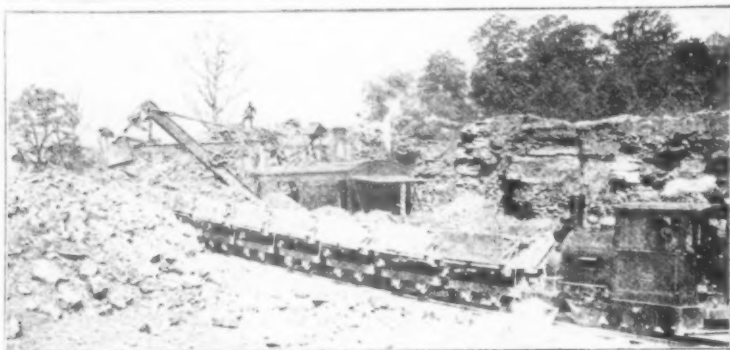
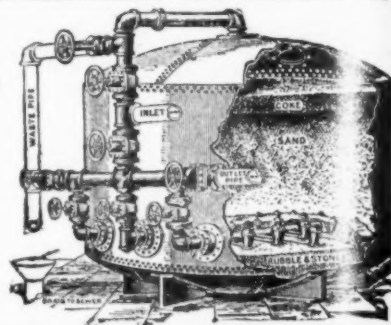
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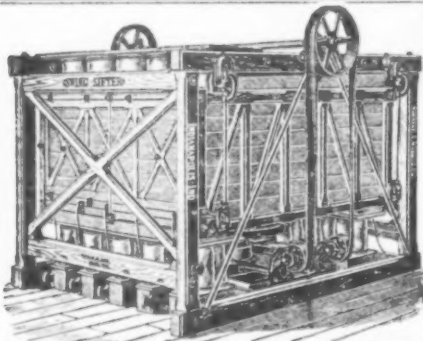
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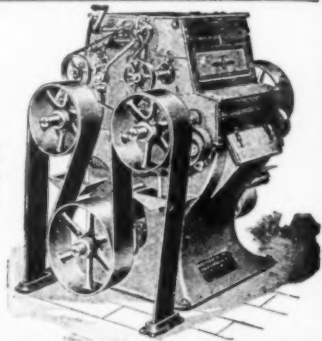
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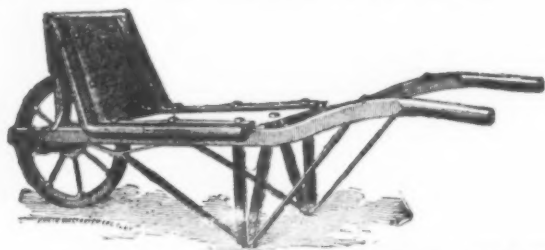
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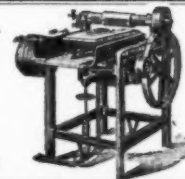
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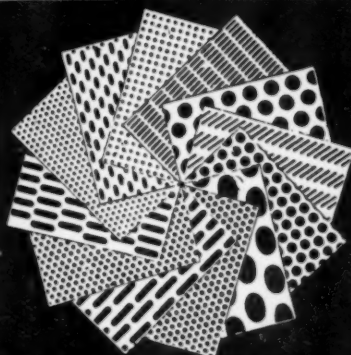
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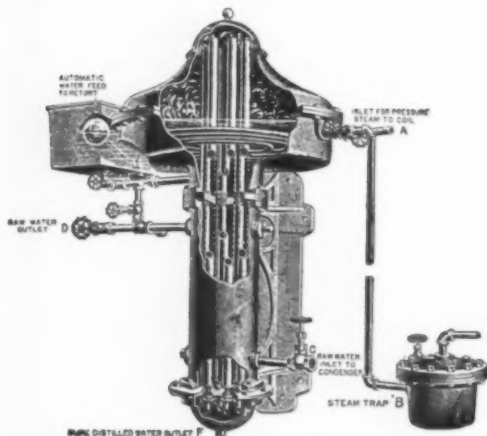
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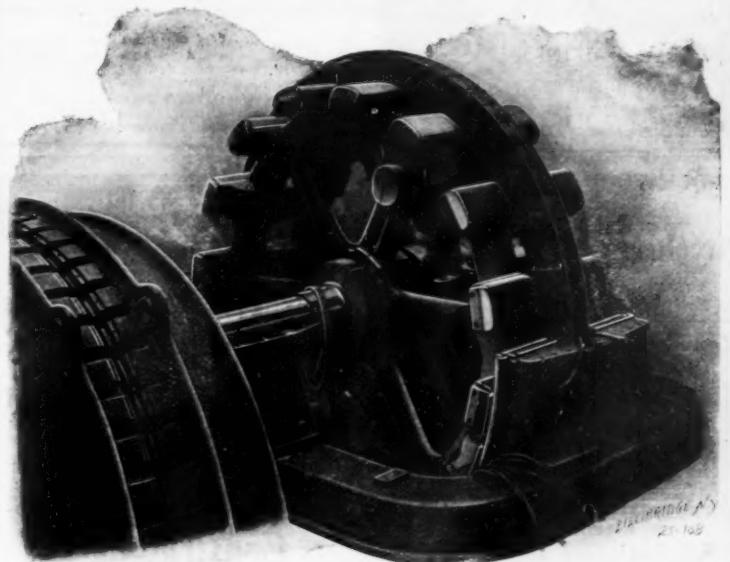
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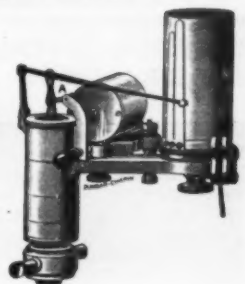
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Triumph Electric Co., Cincinnati, O.
Westinghouse Elec. & Mfg. Co., Pittsburgh, Pa.

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Electric Supply Co., Savannah, Ga.
Jenks, W. H., Richmond, Va.
Northern Elec. Mfg. Co., Madison, Wis.
Stanley Elec. Mfg. Co., Pittsfield, Mass.
Tower-Binford Elec. & Mfg. Co., Richmond, Va.
Upton, W. P., Co., Washington, D. C.

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Northern Electric Supply Co., Madison, Wis.
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Northern Electrical Mfg. Co., Madison, Wis.
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Smith, Samuel J. & Co., Charlotte, N. C.
Stanley Electric Mfg. Co., Pittsfield, Mass.
Tower-Binford Elec. & Mfg. Co., Richmond, Va.
Triumph Electric Co., Cincinnati, O.
Upton, W. P., Co., Washington, D. C.
Westinghouse Elec. & Mfg. Co., Pittsburgh, Pa.

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Stanley Electric Mfg. Co., Pittsfield, Mass.
Triumph Electric Co., Cincinnati, O.
Westinghouse Elec. & Mfg. Co., Pittsburgh, Pa.
Western Electrical Supply Co., St. Louis, Mo.

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Guarantee Electric Co., Chicago, Ill.
Kentucky Electrical Co., Owensboro, Ky.
Smith, Samuel J. & Co., Charlotte, N. C.
Tower-Binford Elec. & Mfg. Co., Richmond, Va.

Electrical Supplies.

Alexander, Jr., Co., S. B., Charlotte, N. C.
Electrical Material Co., Baltimore, Md.
Electric Supply Co., Savannah, Ga.
General Electric Co., Schenectady, N. Y.
Guarantee Electric Co., Chicago, Ill.
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Northern Electrical Mfg. Co., Madison, Wis.
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Sturtevant Co., B. F., Boston, Mass.
Tower-Binford Elec. & Mfg. Co., Richmond, Va.
Triumph Electric Co., Cincinnati, O.
Western Electrical Supply Co., St. Louis, Mo.
Westinghouse Elec. & Mfg. Co., Pittsburgh, Pa.

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Electric Trucks.

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Spencer & Hall, Baltimore, Md.

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Bates, James, Sons, Baltimore, Md.
Curran, Jas. E., Elevator Co., Cincinnati, O.
Fairmount Machine Co., Philadelphia, Pa.
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Link-Belt Engineering Co., Philadelphia, Pa.
Maryland Foundry & Machine Co., Baltimore, Md.
Morse, Williams & Co., Philadelphia, Pa.
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Tate, Jones & Co., Pittsburgh, Pa.

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Dow Wire Work Co., Louisville, Ky.
Dufur & Co., Baltimore, Md.
Ingalls, Wm., Wire & Iron Works, Detroit, Mich.
Ludlow-Saylor Wire Co., The, St. Louis, Mo.
Myers Mfg. Co., The, Fred J., Hamilton, O.

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Tanite Co., The, Stroudsburg, Pa.

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Kennedy, Walter, Pittsburgh, Pa.
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Virginia Bridge & Iron Co., Roanoke, Va.
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Murray Iron Works Co., Burlington, Iowa.
Mecklenburg Iron Works, Charlotte, N. C.
Minnigerode, Wm., Lynchburg, Va.
Newport News Ship'g & Dry Dock Co., N. News, Va.
Phillips, Edward W., Baltimore, Md.
Phoenix Iron Works Co., Meadville, Pa.
Remington Machine Co., Wilmington, Del.
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Salem Iron Works, Winston-Salem, N. C.
Schofield, J. S., Sons Co., Macon, Ga.
Smith-Courtney Co., Richmond, Va.
Southern Eng. & Boiler Works, Jackson, Tenn.
Southward Foundry & Machine Co., Philadelphia, Pa.
St. Louis Iron & Machine Works, St. Louis, Mo.
Struthers, Wells & Co., Warren, Pa.
Sturtevant Co., B. F., Boston, Mass.
Union Iron Works Co., Selma, Ala.
Val & Murdoch Iron Works, Charleston, S. C.
Valler Iron Works, Williamsport, Pa.
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Wetherill, Robert, & Co., Chester, Pa.
Westinghouse Machine Co., Pittsburgh, Pa.
York Mfg. Co., York, Pa.

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Blakeslee Mfg. Co., The, Birmingham, Ala.
Columbus Machine Co., Columbus, O.
Fairbanks Co., Baltimore, Md.
Olds Motor Works, Detroit, Mich.
Otto Gas Engine Works, Philadelphia, Pa.
Struthers, Wells & Co., Warren, Pa.
Westinghouse Machine Co., Pittsburgh, Pa.

Engines. (Gas and Kerosene.)

Metz, A., New York, N. Y.

Engines. (Oil.)

Aultman Co., The, Canton, O.

Engravers.

Acme Photo-Engraving Co., Baltimore, Md.
Alpha Photo-Engraving Co., Baltimore, Md.
Baltimore Engraving Co., Baltimore, Md.
Middleton, J. W., Chicago, Ill.

Exhaust Heads.

Bonar, James, & Co., Pittsburgh, Pa.
Burt Mfg. Co., Akron, O.
Sterling Blower & Pipe Mfg. Co., Hartford, Conn.

Expansion Bolts.

New Jersey Foundry & Machine Co., Plainfield, N. J.

Fans. (Electric.)

Electrical Material Co., Baltimore, Md.

Fans. (Ventilating.) (See Blowers, Exhaust Fans.)

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Bonar, James, & Co., Pittsburgh, Pa.
Cann City Boiler Co., Dayton, O.
Green Fuel Economizer Co., Matteawan, N. Y.
Greenwald Co., I. & E., Cincinnati, O.
Harrison Safety Boiler Works, Philadelphia, Pa.
Kelley, Benj. F., & Son, New York, N. Y.
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Park Mfg. Co., Charlotte, N. C.
Patterson, Frank L., New York, N. Y.
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Scaife, Wm. B., & Sons, Pittsburgh, Pa.
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Warren Webster Co., Camden, N. J.

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Baeder, Adamson & Co., Philadelphia, Pa.

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Bolles Iron & Wire Works, J. E., Detroit, Mich.
Dow Wire Work Co., Louisville, Ky.
Dufur & Co., Baltimore, Md.
Eureka Supply Co., Chattanooga, Tenn.
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Ludlow-Saylor Wire Co., St. Louis, Mo.
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Files.

Barnett Co., G. & H., Philadelphia, Pa.
Bealy, Chas. H., & Co., Chicago, Ill.
Miller Oil & Supply Co., Indianapolis, Ind.
Nicholson File Co., Providence, R. I.

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Watson, N. A., Erie, Pa.

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Burt Mfg. Co., The, Akron, O.
Textile Mill Supply Co., Charlotte, N. C.

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Carolina Fire-Brick Works, Killian, S. C.
Garden City Sand Co., Chicago, Ill.
Ohio Fire Brick Co., Oak Hill, O.
Pomona Terra Cotta Co., Pomona, N. C.
Powhatan Clay Mfg. Co., Richmond, Va.
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Morse, Williams & Co., Philadelphia, Pa.

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Jeffrey Mfg. Co., Columbus, O.
Link-Belt Engineering Co., Niceown, (Phila.) Pa.

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Dixon Crucible Co., Jos., Jersey City, N. J.
Hill & Griffith Co., Cincinnati, O.

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Huth Bros., Rochester, N. Y.
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Wrightville Hardware Co., Wrightville, Pa.

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Wilce Co., The T., Chicago, Ill.

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Myers & Bro., F. E., Ashland, O.
Heating Apparatus.
American Blower Co., Detroit, Mich.

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Byers Machine Co., John F., Ravenna, O.
Carlin Machinery & Supply Co., Allegheny, Pa.
Case Manufacturing Co., The, Columbus, O.

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Boston Belting Co., Boston, Mass.
Eureka Fire Hose Co., New York, N. Y.
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Barber Mfg. Co., A. H., Chicago, Ill.
Cochran Co., Lorain, O.
Frick Co., Waynesboro, Pa.

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Delaware Trust Co., Wilmington, Del.
Fordnady, J. P., Cincinnati, O.
Maid, Louis B., & Co., New York, N. Y.

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American Steam Gauge Co., Jamaica Plain, Mass.
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Carrington Co., Philadelphia, Pa.
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Koppel, Arthur, New York City.
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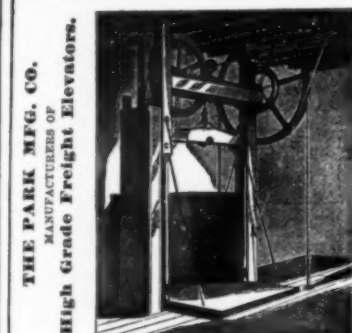
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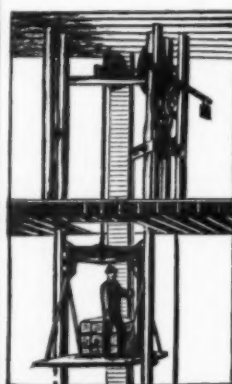
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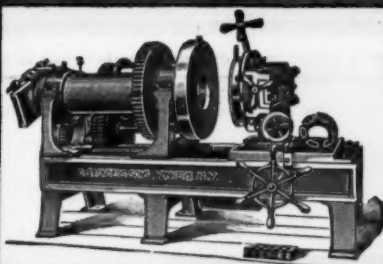
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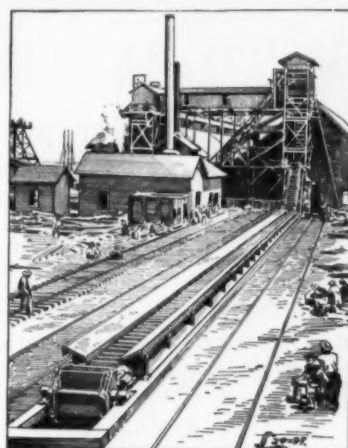


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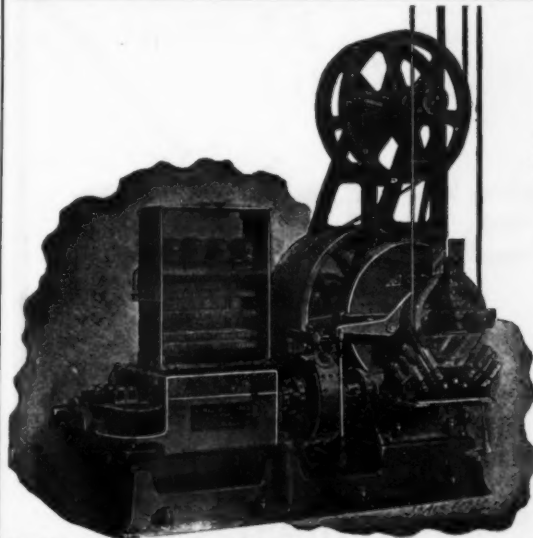
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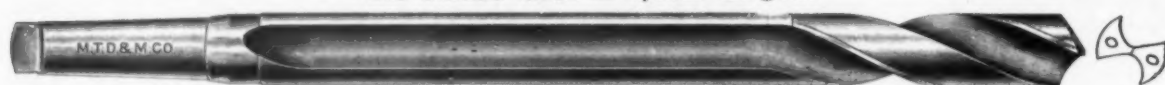
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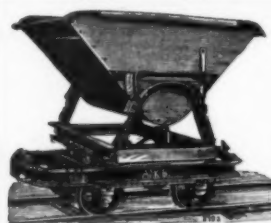
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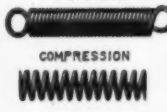
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Williams, J. R., & Co., Arvon, Va.

Roofing and Siding. (See Roofing.)

Roofing. (Metal Shingles.)
Cortright Metal Roofing Co., Philadelphia, Pa.
Merchant & Co., Inc., Philadelphia, Pa.
Montross Metal Shingle Co., Camden, N. J.

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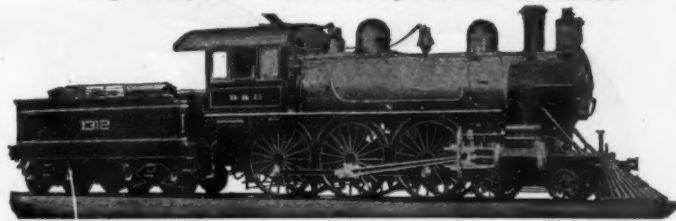
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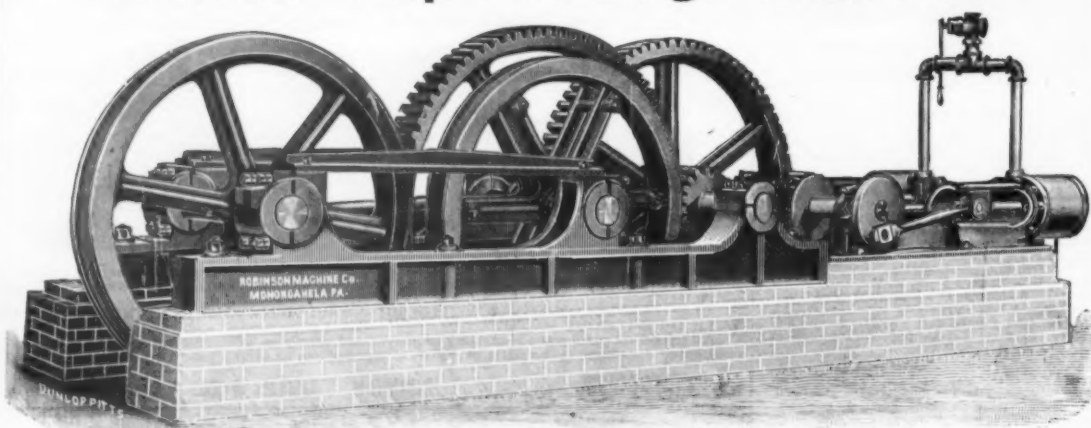
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- 4th. Rapidity of handling cars. The full train of cars is attached to the rope at the inside parting, proceeding to the tippie without delay. The empty train is attached at the tippie and returns to the inside parting for distribution in the mine.
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Vermont Farm Machine Co., Bellows Falls, Vt.

Separators. (Dust.)
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Austin Separator Co., Detroit, Mich.
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Harrison Safety Boiler Works, Philadelphia, Pa.
Webster Warren & Co., Philadelphia, Pa.

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Davis Machine Co., W. P., Rochester, N. Y.

Shapers.
American Tool Works Co., Cincinnati, O.

Sheet-Metal-Working Machinery.
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Sheet Steel and Iron.
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Shingle, Lath and Slave Machinery.
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Lane Mfg. Co., Montpelier, Vt.
Terror Mfg. Co., Lockport, N. Y.

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Newport News Shipbuilding & Dry Dock Co., Newport News, Va.

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Dowman Mfg. Co., Atlanta, Ga.
Merchant & Co., Inc., Philadelphia, Pa.
National Skylight & Construction Co., New York, N. Y.
Noorden Co., E. Van, Boston, Mass.

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Galt, John, & Sons, New York, N. Y.
Genuine Bangor Slate Co., Easton, Pa.
David McKenna, Hattington, Pa.
Williams, J. B., & Co., Arvonis, Va.

Slaters' Tools.
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Smoke Stacks. (Iron and Steel.)
Hammond Iron Works, Warren, Pa.
Keeler, E., Co., Williamsport, Pa.
Scheldt, J. S., Sons Co., Macon, Ga.
York Mfg. Co., York, Pa.

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Dopp, H. Wm., & Son, Buffalo, N. Y.

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French Spring Co., A., Pittsburg, Pa.
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Ludlow-Saylor Wire Co., The, St. Louis, Mo.

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Harris, Theo., & Son, St. Louis, Mo.

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General Fire Extinguisher Co., Providence, R. I.
International Sprinkler Co., Philadelphia, Pa.
Pfeiffer & Hanger Mfg. Co., St. Louis, Mo.

Stairways. (Iron.)
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Stamp Mills.
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Standpipes.
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Hartley Boiler Works, Montgomery, Ala.
Keeler Co., E., Williamsport, Pa.
Means & Fulton Iron Works, Birmingham, Ala.
Virginia Bridge & Iron Co., Roanoke, Va.
York Mfg. Co., York, Pa.

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American Steam Gauge & Valve Mfg. Co., Jamaica Plain, Mass.

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Lankenheimer Co., Cincinnati, O.

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Finished Steel Co., The, Youngstown, O.

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McMillan Bros. Co., Mobile, Ala.

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Westinghouse Machine Co., Pittsburg, Pa.

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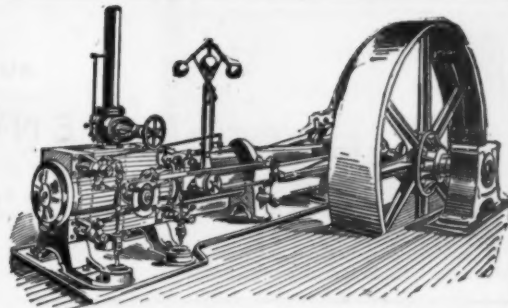
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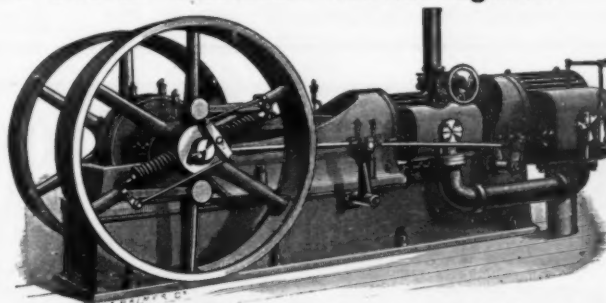
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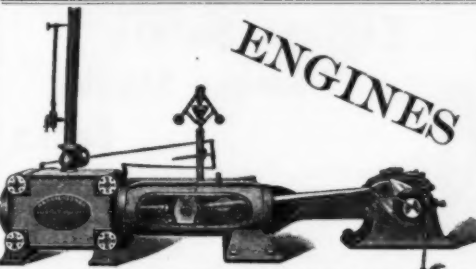
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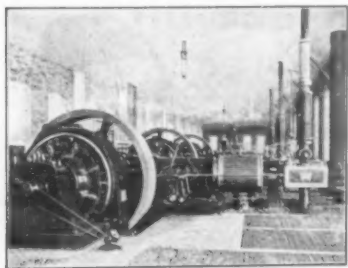
HARDIE-TYNES FOUNDRY & MACHINE COMPANY,
Box 406, Manufacturers, BIRMINGHAM, ALA.

SOUTHWARK FOUNDRY & MACHINE CO.

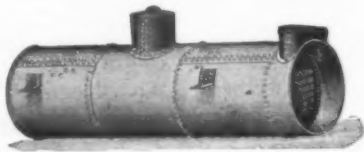
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Porter-Allen Automatic Engines,
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AUTOMATIC
Self-Oiling
ENGINES
for
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THE BALL ENGINE CO.
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Boilers and Engines, HEATERS AND TANKS.

Manufactured by THE BROWNELL & COMPANY, DAYTON, OHIO. P. O. Box 912.
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THE BABCOCK & WILCOX CO.

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CABLE ADDRESS
NEW YORK
"GLOBEBOXES"
ALL FOREIGN OFFICES
"BABCOCK"

WATER TUBE

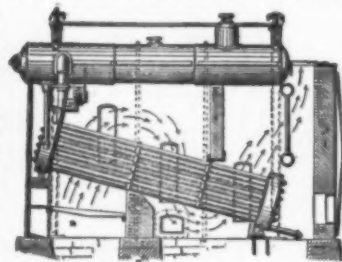
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SEND FOR OUR BOOK "STEAM"

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HAMMOND PATENT WATER TUBE BOILER.

The most economic boiler on the market.

"THE QUICK STEAMER."

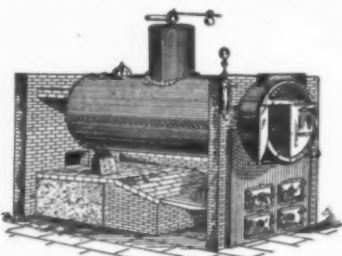
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Stills, Stand Pipes, Steel Stacks, Etc.

Tankage Promptly Supplied.

ALWAYS RELIABLE.

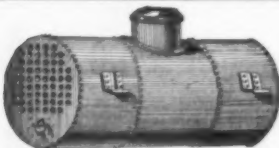
HAMMOND IRON WORKS,
WARREN PA., U. S. A.



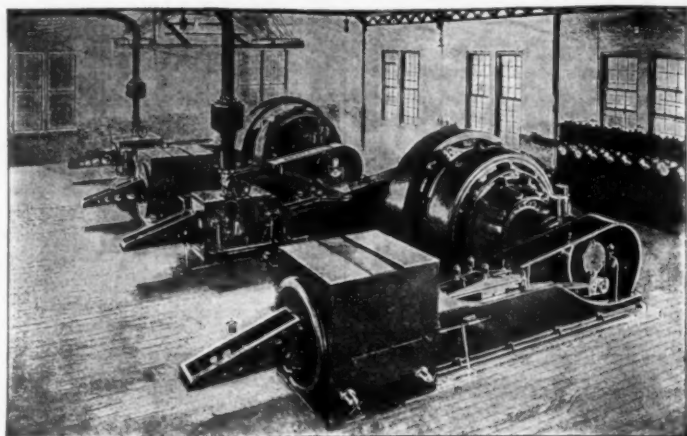
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Injectors, Inspirators,
Saw Mill Machinery,
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Hangers, Etc.

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Boilers, Stand Pipes, Tanks,
Smoke Stacks, etc., etc. MONTGOMERY, ALA.



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Mill Engines,

Electric Light Engines,

Electric Railway Engines,

All Types, Sizes and Speeds.

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26 CORTLANDT ST., NEW YORK, N. Y.

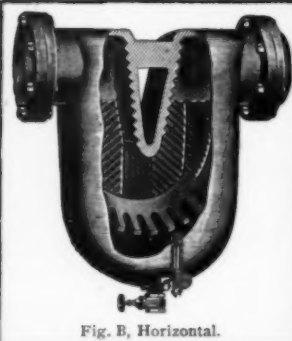


Fig. B, Horizontal.

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155 Woodbridge St.
DETROIT, MICH.

Many Steam Separators Are Dear

that are rated cheap. Unless they do their work properly, at all times, and not give trouble, the proposition of low price has no significance.

It is this alliance between thorough efficiency and right price which has made the Austin Separator a long-time favorite with steam users all over the United States and Canada.

Made in all styles and sizes, for all conditions of service. Will be shipped on thirty days' trial to prove our claim that it separates all moisture from live steam and removes all oil and other impurities from exhaust steam.

If not satisfactory, return at our expense. Shall we send one?

BOILERS

With Rivet Holes Drilled after Plates are Bent and in Position, Tanks and Sheet Iron Works, Engines, Cotton Gins and Presses. Machinery for Fertilizer Works and Phosphate Washers, Asbestos Magnesia Pipe Covering and Magnesia Cement Felting for Boilers, Domes, Steam Piping, etc.

VALK & MURDOCH IRON WORKS, Charleston, S. C.

BOILERS, TANKS, PENSTOCKS,
FEED WATER HEATERS,

General Steel Plate Construction.

GEM CITY BOILER CO., Dayton, Ohio.



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NOTICE THE BLADES—HAVE YOU?
The "CHALLENGE" IS THE CLEANER
THAT CLEANS.

The cleaning blades and their controlling springs are the only parts that wear out, and these parts are always obtainable at short notice. They can be sent by mail at small cost.

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THE HAZELTON BOILER CO., Sole Props. & Mfrs., Rutherford, N. J.
SEXTON & ROBBINS Co., Southern Selling Agents, Charlotte, N. C. See "Ad." next week.

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GREEN-WHEELOCK ENGINES

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OPERATING CORLISS STEAM ENGINE WORKS

U. S. A.

We furnish complete Steam Plants with guaranteed economy as low as 1 Pound of Coal Per H. P. Per Hour.

Classified Index of Advertisers.

For ALPHABETICAL INDEX See Page 31.

Water-Works and Sewerage.
 Flint & Walling Mfg. Co., Kendallville, Ind.
 Nicol T. W. Mobile, Ala.
 Wood, R. D. & Co., Philadelphia, Pa.

Weighing Machine. (Automatic.)
 Automatic Weighing Machine Co., Boston, Mass.

Well Contractors. (Oil, Artesian, etc.)
 Andrews, Perry & Bro., Atlanta, Ga.

Austin Mfg. Co., F. C., Harvey, Ill.
 Bacon Air Lift Co., New York, N. Y.
 Cook Well Co., St. Louis, Mo.
 Gould, F. M., Richmond, Va.

Hughes Specialty Well Drilling Co., Charleston, S. C.

Well Drillers. [See Well Tools and Supplies.]

Well Tools and Supplies. (Artesian.)

Andrews, Perry & Bro., Atlanta, Ga.

Austin Mfg. Co., F. C., Harvey, Ill.

Bacon Air Lift Co., New York, N. Y.

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Kilbourne & Jacobs Mfg. Co., Columbus, O.

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American Steam Gauge Co., Jamaica Plain, Mass.

Crosby Steam Gauge & Valve Co., Boston, Mass.

Lunkensheimer Co., Cincinnati, O.

White Lead.

French, Samuel H., & Co., Philadelphia, Pa.

Windlasses.

American Ship Windlass Co., Providence, R. I.

Windmills.

Flint & Walling Mfg. Co., Kendallville, Ind.

Window Guards. (Wire.) [See Wire Goods.]

Wire Cloth. (Iron Steel, Brass, etc.)

Caldwell, H. W., & Sons, Chicago, Ill.

Meyers, Fred, J., Mfg. Co., Hamilton, O.

New Jersey Wire Cloth Co., Trenton, N. J.

Wire Goods.

Balderson, H., & Son, Baltimore, Md.

Bolles Iron & Wire Works, J. E., Detroit, Mich.

Dow Wire Works Co., Louisville, Ky.

Dufur & Co., Baltimore, Md.

Inglis, Wm., Wire & Iron Works, Detroit, Mich.

Ludlow-Baylor Wire Co., The, St. Louis, Mo.

Meyers Mfg. Co., The, Fred J., Hamilton, O.

New Jersey Wire Cloth Co., Trenton, N. J.

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Fairbanks Co., Baltimore, Md.

Hasard Mfg. Co., Wilkes Barre, Pa.

Lidgerwood Mfg. Co., New York, N. Y.

Boelling's, John A., Sons Co., Trenton, N. J.

Trenton Iron Co., Trenton, N. J.

Wire-Rope Tramways. [See Tramways.]

(Wire Rope.)

Wrenches. (Drop Forged.)

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Trevor Mfg. Co., Lockport, N. Y.

Woodworking Machinery.

Chattanooga Machinery Co., Chattanooga, Tenn.

Coe Mfg. Co., The, Painesville, O.

Cordeman, Meyer & Co., Cincinnati, O.

DeLoach Mill Mfg. Co., Atlanta, Ga.

Egan Co., The, Cincinnati, O.

Fay, J. A., & Co., Cincinnati, O.

Frank Machinery Co., The, Buffalo, N. Y.

Gibbs, W. H., & Co., Columbia, S. C.

Greaves, K. H. & Co., Cincinnati, O.

Huther Bros., Rochester, N. Y.

Lane Mfg. Co., Montpelier, Vt.

Root, B. M., York, Pa.

Salem Iron Works, Winston-Salem, N. C.

Shimer, Samuel J., & Sons, Milton, Pa.

Smith Machine Co., H. B., Smithville, N. J.

Trevor Mfg. Co., Lockport, N. Y.

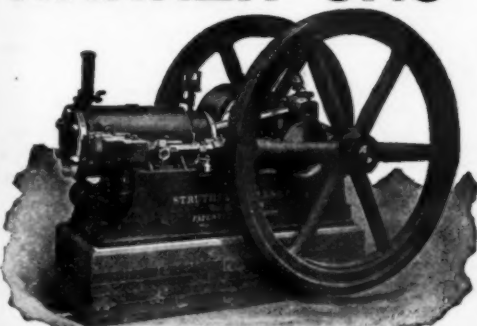
Woods, S. A., Machine Co., South Boston, Mass.

Zinc.

Merchant & Co., Inc., Philadelphia, Pa.

New Jersey Zinc Co., New York, N. Y.

WARREN GAS ENGINE.



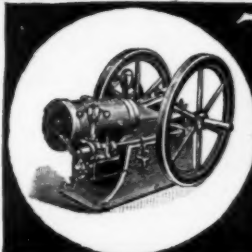
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GASOLINE ENGINE
STANDS SUPREME
LET US TELL YOU WHY
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Specially Designed For Gas, Gasoline and Oil Engines.

Bolts directly on engine fly-wheel.
 A powerful grip combined with a positive release.
 A simple mechanism enclosed in a dust-proof case.
 The greatest ease of operation and adjustment.

Write for catalogue and prices.

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"B & C" Gas Engines
Clutch Pulley.

Don't Take Chances:

Forestall the boiler accident
which may occur at any moment,
or which may never occur. A

WRIGHT IMPROVED
SAFETY WATER COLUMN

is the guarantee that it won't.
They are always on guard and
attract attention in the event of
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economizers, as well as safeguards.
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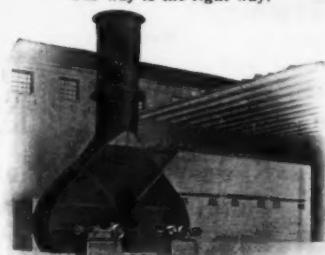
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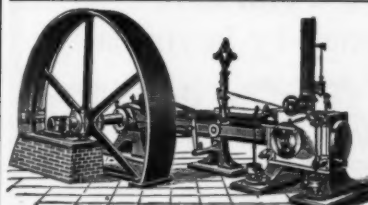
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BOILERS OF ALL STYLES AND SIZES.

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Improved Bates Corliss Engine

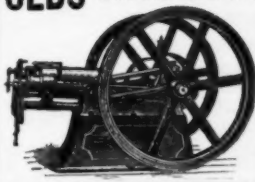
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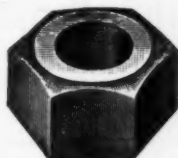
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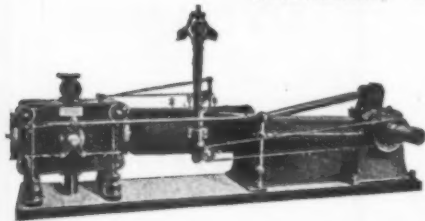
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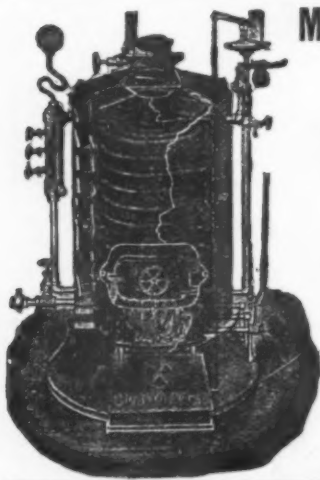
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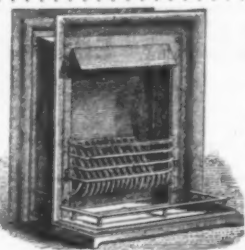
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Three outlet valves—opening consecutively as the water fills the Trap—any one of them alone capable of discharging any ordinary inflow of water. Hence the name—

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Emergency Steam Trap.**

It acts instantly in emergencies. Never fails. But wastes no steam under ordinary conditions.

If you have a large amount of condensation to dispose of, you'll find satisfaction and economy in this Trap.

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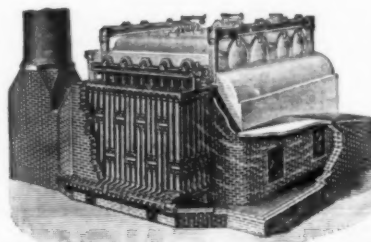
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Rainbow Packing.

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Cylinder, Engine, Spindle,
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Oils for all types of Machinery.

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**WM. C. ROBINSON & SON,
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The Detroit Sight Feed Lubricators

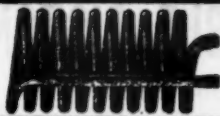
not only give better service than other makes, but they last longer and require less repairs. They are of superior design, are extra strong and heavy, and each lubricator is tested at 300 pounds pressure to the square inch before it leaves the factory. Catalogue on application.

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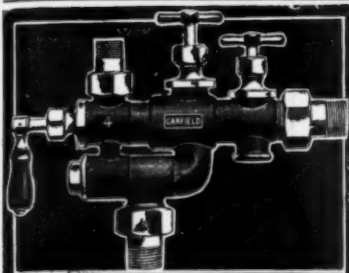


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Can be re-seated under boiler pressure, and last forever. Sent on 30 days' trial.

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These appliances combine valuable features for burning the smaller sizes of hard and soft coal, such as Anthracite, Culm, Birdseye, Buckwheat and Bituminous Slack, while the Grate Alone stands unequalled for burning the larger sizes of these fuels with natural draught. The Argand Blower gives EXCELLENT RESULTS in burning Spent Tan, Sawdust, Bagasse, For Boiler and etc. For full particulars send for other literature. Illustrated Descriptive Catalogue C. McCLAVE, BROOKS & CO., Scranton, Pa.

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18 years as sellers and manufacturers is the price we have paid for our experience. Our improved machinery and methods for manufacturing greatly REDUCES THE COST AND YOU GET THE BENEFIT OF IT.

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This heater is designed with special reference to obtaining highest results and greatest durability. All materials are of a quality and weight to successfully withstand years of usage, and workmanship is of the highest grade.

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SURFACE CONDENSERS.
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Thompson Improved

Original Thompson
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Indicator.

ADOPTED BY U. S. NAVY.

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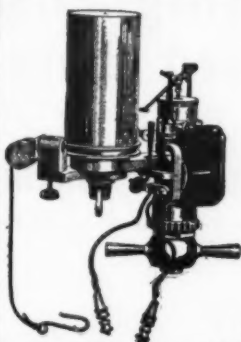
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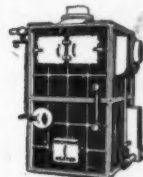
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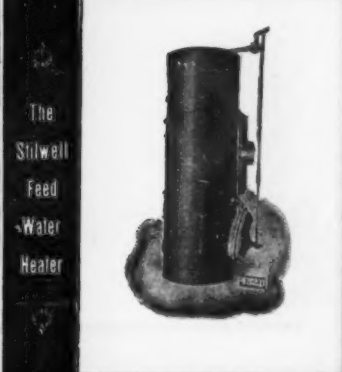
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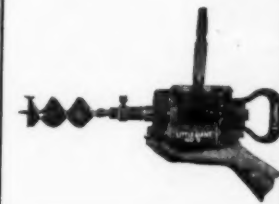
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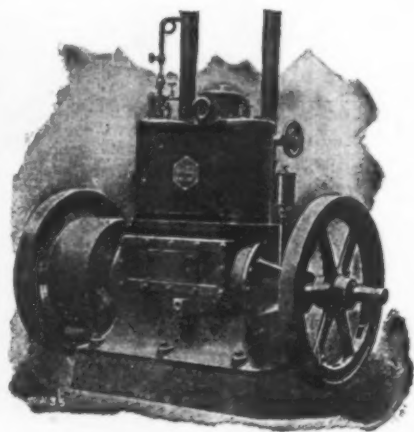
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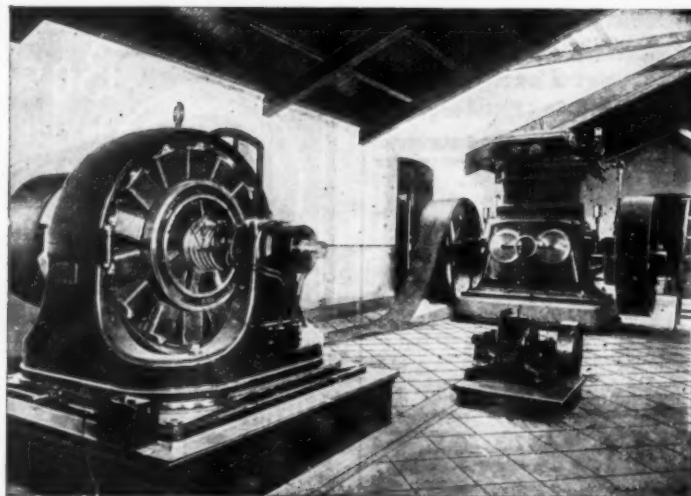
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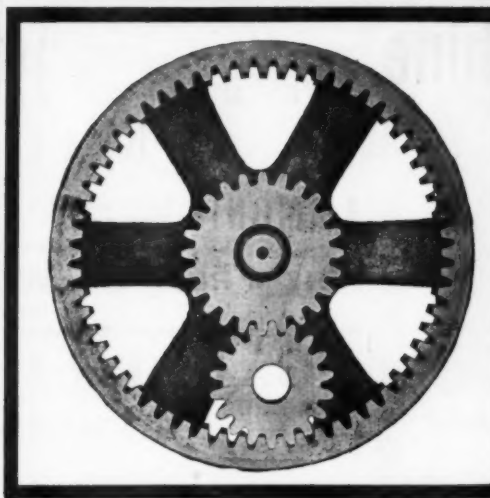
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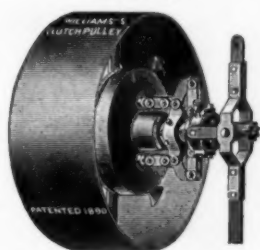
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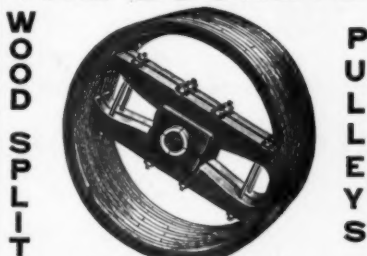
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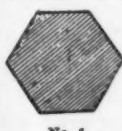
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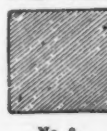
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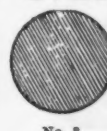
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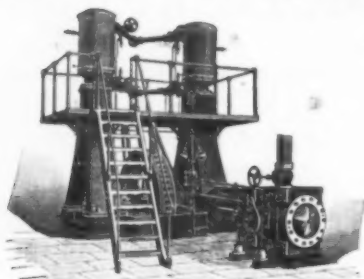
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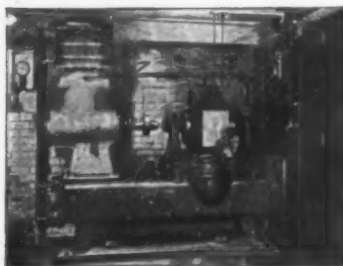
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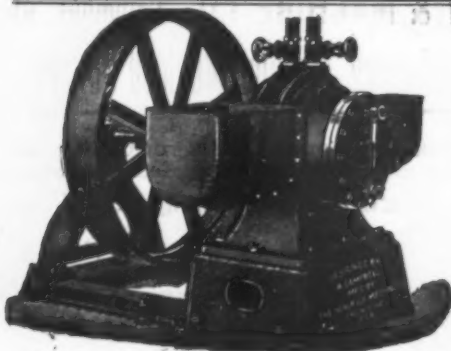


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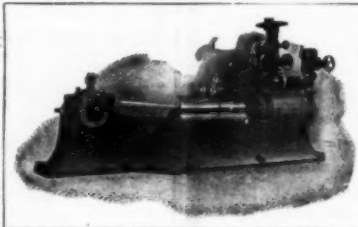
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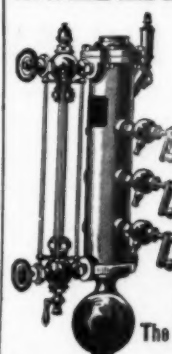


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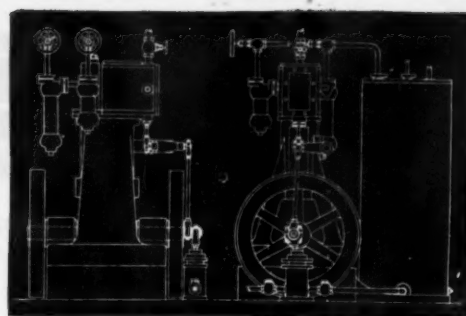
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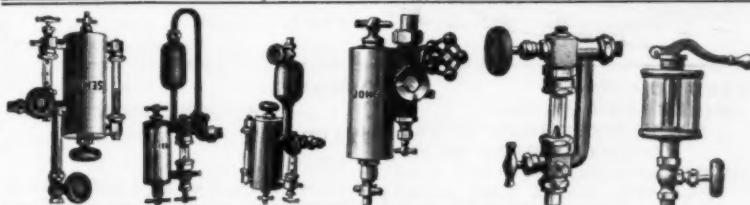
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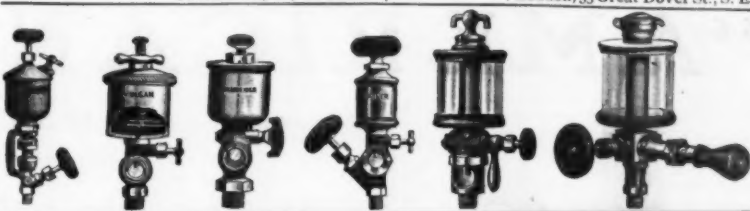
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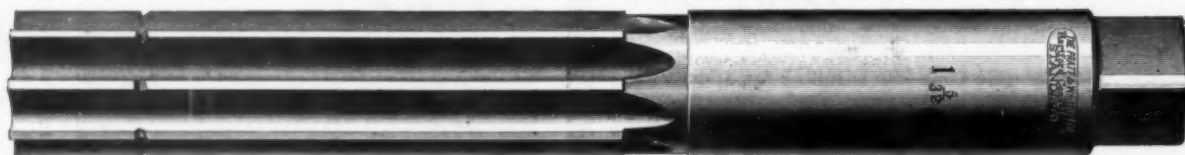
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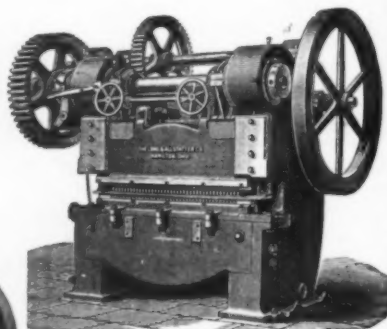
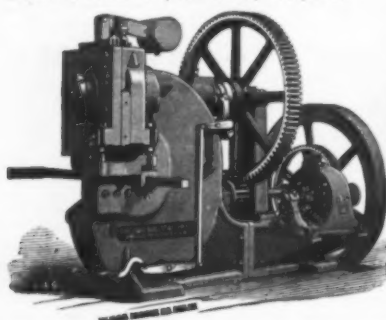
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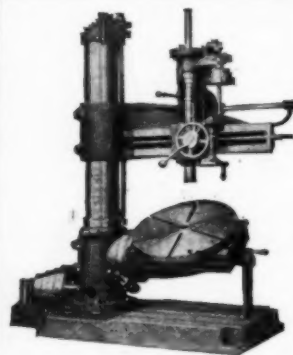
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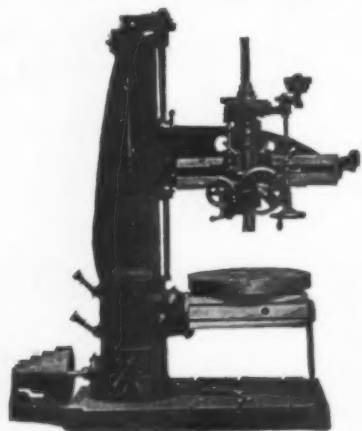
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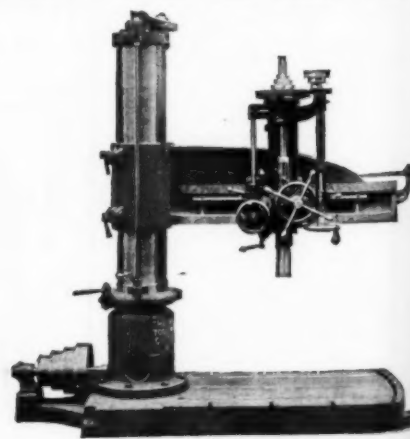
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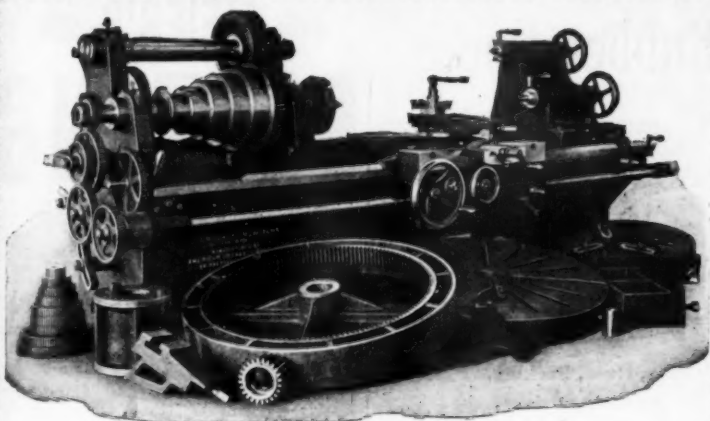
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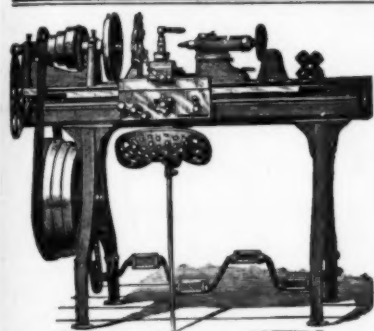


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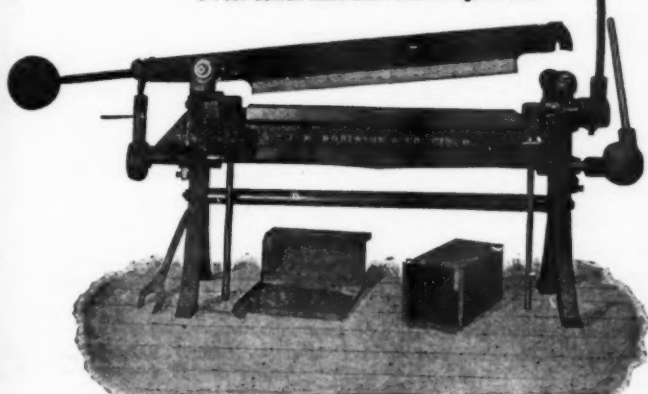
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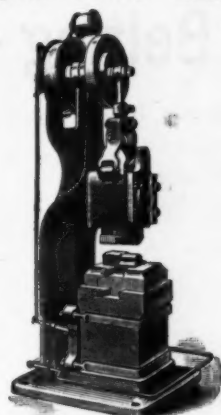


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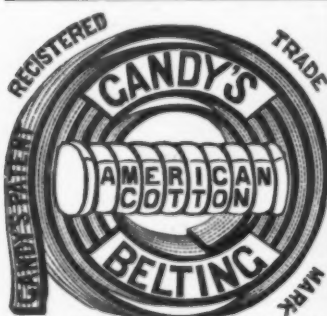
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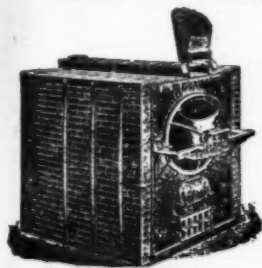
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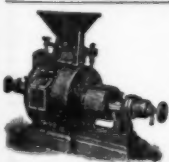


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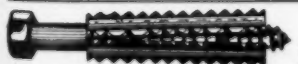
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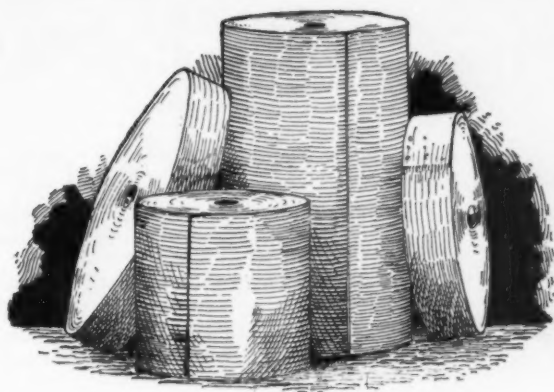
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Important Litigation Relating to Magnesia Covering Patents.

The Keasbey & Mattison Co., the owners of the patents for magnesia covering, have commenced a suit in the United States Circuit Court for the Southern District of New York against the Philip Carey Mfg. Co., George D. Crabbs, J. E. Breese, Schoellkopf, Hartford & Hanna Co., J. F. Schoellkopf, Jr., James Hartford, W. W. Hanna, C. P. Hugo Schoellkopf and Jesse W. Starr to restrain the defendants from making and selling magnesia covering for boilers and steam pipes containing more than 50% of magnesia, and especially coverings containing 85% of magnesia.

The bill prays for a preliminary writ of injunction, to be continued during the pendency of the suit, and upon the final determination thereof to be made perpetual, and also demands an accounting and damages.

All persons are respectfully requested to refrain from purchasing covering infringing these patents, as such purchasing must of necessity lead to suit. Beware of Fraudulent so-called "Magnesia" Coverings as well as those infringing on patents.



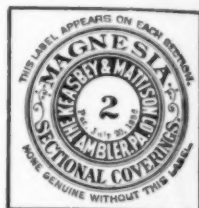
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VOL. XL. No. 25.
WEEKLY.

BALTIMORE, JANUARY 9, 1902.

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BALTIMORE, JANUARY 9, 1902.

COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week. For the first issue in the month we should receive copy by Friday Morning of the week preceding.

Commenting upon the recent article in the Manufacturers' Record by Mr. F. E. Seward, the American authority on the coal trade, dealing with the progress of the coal-mining industry in the South during the past year, the News of Chattanooga, Tenn., says:

The article is an optimistic one as regards developments in mining circles for the coming year, and as the Manufacturers' Record is one of the most reliable trade and industrial publications printed, it is evident that the mining future of the State is constantly brightening, and is, at the same time, affecting other branches of industry.

A Call to Carolina.

Gen. Joseph L. Stoppelbein, editor of the Spartanburg Truth, after a visit to the Charleston Exposition, is convinced that if a Chinese wall were placed around South Carolina the people of the State could exist without the balance of the world, as they could produce behind the wall all that is necessary for food, raiment and well-being of a happy people. Inspired by that thought, he writes the Charleston News and Courier suggesting the organization of a get-together club embracing the people of the whole State. He says:

We want to see the whole of the people of South Carolina living together as one happy family. Let us all meet together as brother to brother, bear each other's burdens, share each other's joys, defend each other and pledge ourselves to aid each other in every movement looking toward the upbuilding of South Carolina. Let us give more time to business and less to politics. Our business may slip away from us, but the politician we have with us always.

This, you may say, is good theory, but it lacks practicability. Very well—then let us get down to something like the practical part.

It is very generally conceded that the very best results are always attained by a thorough organization. We have given the matter considerable thought, and we believe that an organization can be effected.

General Stoppelbein suggests such an organization, under State auspices, as a board of trade, which shall be a center of activity for the development of the industrial and commercial in-

terests of the State and for the promotion of enterprises which shall add to its material wealth.

The suggestion is a practical one, though the feature involving preliminary organization through appointment by State authorities might tend to limit the efforts to remove the movement from politics. Still, if the business men of South Carolina or any other Southern State should come together with the determination to eschew all politics except that calculated to benefit the State, there will be little reason for the rather despairing sentiment that business may slip away, but the politician will always be there.

The South and Self-Reliance.

Dr. Walker Lewis is saying some things to his brother Georgians that ought to stir them up. Georgia Methodism, he says, "assesses four cents a member for the education of the young and seems satisfied. It spends more upon tobacco before breakfast than it gives to education in a twelve-month." We do not wonder that he urges the Georgia Methodists to give their money to Emory College and the Baptists to Mercer. Hear him:

"Do our people know that one negro college for boys and girls in Atlanta has more endowment than Emory and Mercer and the University? Do they really know that another institution in Atlanta for colored girls is better equipped for teaching than is any college for white girls in the State? Do they really know and consider that the negro colleges in Georgia can buy all the property of other colleges of the Commonwealth and leave a balance that more than equals the endowment of Emory or Mercer? These are, nevertheless, facts. And yet there are 400,000 Methodists and Baptists in this Commonwealth beneath or back of these institutions—mostly beneath."

We are surprised if the facts are as given. The officers of these white colleges ought to show the energy that Booker T. Washington shows for Tuskegee. There is money to be had North or South. Let them go for it.—Independent.

Dr. Lewis is doubtless correct. But the Independent, in its comments as quoted above, shows how little it understands the situation. The comparative wealth of these negro schools is due to the philanthropists of the North, who, in this particular, carry to an extreme that phase of beneficence which prompts some folks to give freely to foreign missions, but nothing to home missions. These philanthropists, to whose sentimental fancy the negro has wonderfully appealed, have never evinced any great practical interest in the education of the poor of their own race who happened to live South. To the average man is thus given an impression that these great money-givers have a definite plan to aid the negro in so-called education which involves a careful avoidance of help in the education of the whites of the South. But if this be so, they are surely sowing the wind for the reaping of a whirlwind. With no real knowledge of the negro or of the character of education which suits him best, and beyond which for his own good he ought not to be forced, they have given heed to every appeal made for help for negro schools. It has, in fact, been a fad, and like many other fads, has been worked for all it was worth. The money given to Tus-

kegee and Hampton has been given for a good work, but Tuskegee and Hampton are exceptions, demonstrating in their very accomplishments the waste and wrong done in other directions.

The Independent says there is money to be had North or South for the advancement of the education of the whites. As far as the North is concerned, that money must be lying very low, if it is, indeed, in existence. However greatly the South would revere the memory of the Northern men who might pour their millions into its educational system for its strengthening and enlargement, particularly on industrial lines, we cannot escape a conviction that those millions are something of an ignis fatuus, in the chasing of which much time and much energy would be wasted and much Southern opportunity lost; for the chase would undoubtedly divert Southern men of wealth from their own duty in the premises.

The South is still poor. It requires many years for a people to recover from the destruction of the war entailing a loss at least five times as much as the aggregate capital of all the national banks of the United States today. At the same time, the South has done much in its poverty, not only for its whites, but for the negroes. It could possibly do more to advance education, and its people are being pressed in that direction by every active educator in that section. These men believe that for their own people the main reliance should be self-help, a powerful educational influence in itself. That self-help, while welcoming the voluntary co-operation of outside wealth, looks primarily to the liberality of Southern men themselves, whether they have made their fortunes in hard struggle in their own section or have accumulated elsewhere. The drains upon them made necessary by success have not permitted the rapid growth in them of that public spirit which has blessed other parts of the country. They have had hardly time to take in the actual facts about the necessities of the rising generation or to comprehend the significance for good of private generosity for the public welfare. But they are gradually working toward that conclusion, and patient, persistent publicity, untiring furtherance of practical, businesslike plans for the expenditure of money for real education where it is most needed, will in the end bring Southern wealth to the rescue in ever-increasing volume.

The Drift of Negroes.

Rather a mistaken view of the census figures relating to the negro population of the country is had by the New York Sun. It says that in two States only—Mississippi and Alabama—does the colored population exceed the white population. There is an absolute mistake in that statement, inasmuch as Mississippi and South Carolina are the two States in which the negroes are in a majority of the popu-

lation. There is, moreover, a wrong deduction by the Sun regarding the relative decline of the negro population in such States as Maryland, Kentucky and Missouri, and its increase in Mississippi, Alabama and Florida, for it says:

In the States of the extreme South, in which the material condition of the colored race is least desirable, there has been the largest gain in population. Practically the whole increase is to be found in the Gulf, South Atlantic and Southwestern States, and not in those border States in which the opportunities and inducements to colored citizens are greatest. In the border States the colored voters are held socially in higher regard. The competition of colored labor is decidedly less, and by reason of the smaller percentages of colored residents, race antagonisms, based on fears of colored domination, are little known. Nevertheless, colored people from the extreme South do not seek homes in the border States. They do not move North. On the contrary, as the census figures indicate, they are moving southward, and but for newcomers from Northern States, there would be an actual falling off both in Kentucky and Maryland.

As a matter of fact, the census figures do not indicate that but for newcomers from Northern States there would be an actual falling off in the negro population both in Kentucky and Maryland. Nor do they indicate that negroes from the extreme South do not seek homes in the border States. The figures show, first of all, that between 1890 and 1900 the negroes in fourteen Southern States, from Maryland to Texas, and in the District of Columbia, increased in number from 6,710,582 to 7,835,073, or at the rate of 16.75 per cent., while in the rest of the country from 778,094 to 997,406, or 28.19 per cent. The actual increase of the negroes in Delaware, Maryland, Virginia, Kentucky, Missouri and West Virginia was but 85,496, or 65,227 less than the combined increase in New York New Jersey, Pennsylvania, Ohio, Indiana and Illinois. The increase in New York—29,140—was 9733 more than that in Maryland and 3856 more than that in Virginia. The increase in Pennsylvania—49,249—was 29,842 more than that in Maryland and 38,440 more than that in West Virginia. Illinois' increase, which nearly equalled that of New York, was more than twice that of Missouri and 11,415 more than that in Kentucky, while Indiana's increase was 1240 more than that in Missouri. Massachusetts has now a larger negro population than Delaware, and Pennsylvania's negro population of 156,845 is within less than 5000 of Missouri's negro population.

This notable increase of the negro population in the North is slowly changing the figures of that class of the country's population in Southern States as far south as North Carolina and Tennessee, and is largely due to the migration of the less desirable class of Southern negroes to Northern cities, where they are becoming something of a nuisance, as recent events indicate. There is comparatively little opportunity in the North for the negro to obtain employment in lines for which he is practically fitted, and, as was recently pointed out in the Manufacturers' Rec-

ord in an elaborate analysis of the movement of the negro population, the drift of negroes to such States as Alabama, Florida, Mississippi, Texas, Arkansas and West Virginia is directly traceable to the industrial activities in those States, which offer negroes the chance to better their material condition.

Fooling with Figures.

Preliminary census figures of manufacturing in Tennessee have led some of the daily papers of that State to the unfortunate act of commenting upon the industrial progress of their respective communities to the disparagement of other communities, instead of all working together to ensure the State more progress. Among the first to resort to this disparagement was the Chattanooga Times, which reveals its inanity in making claims that the figures for Chattanooga are defective in that they cover only the industries within the corporate limits of the city. It says:

The preliminary statement given out by the census bureau, and which was published in the Chattanooga Times a few days ago, in which the number of manufacturing establishments in Chattanooga was placed at 320, does not do this city justice, when it is taken into consideration the fact that a great many of the factories, which to all intents and purposes are in the city, are just outside of the corporate line, and do not appear in the preliminary report of the census bureau to be Chattanooga enterprises.

As a matter of fact, some of Chattanooga's most important factories are in the suburbs. The matter was investigated carefully yesterday by a Chattanooga Times reporter, and it was ascertained that seventy-one factories are now located in the various suburbs around Chattanooga. They are distributed as follows:

Hill City, nine; Highland Park, eight; Ridgedale, five; Sherman Heights, eight; East Lake and East End, eleven; Orchard Knob, one; St. Elmo, Mountain Junction and Alton Park, nineteen.

The following does not include such enterprises as the cement factory, the Park Woolen Mills, the Richmond Hosiery Mill and several other concerns at Rossville.

While these are across the line into Georgia, they are owned and operated by Chattanooga parties. The product of these mills is shipped from here, and they employ hundreds of operatives who spend their earnings with the merchants of this city.

It is a very safe and conservative estimate to say that there now are at least 425 factories in and around Chattanooga, for it must be remembered that this city has made rapid strides along the line of acquiring new factories during the past twelve months.

When called upon to explain, the local supervisor of the census stated that only the manufacturing establishments in the corporation proper are given in the census report sent out for Chattanooga, and that the suburban factories are as much a part of the manufacturing interests of Chattanooga as is the population of those districts.

That is a very plain, matter-of-fact, common-sense statement, and is a complete denial of any charge of defective figures, as far as any facts sustaining that charge are deduced by the Chattanooga Times, for the figures expressly deal with the establishments in Chattanooga, and not with those "in and around" it. Only the other day that sheet, going off half-cock in criticism of statistics of another kind, expressed a willingness to wait for the official returns. Now that the census has given figures in its own field, the Chattanooga Times calls them defective, and reveals in its criticism the absurdity of its pretensions as a statistical authority. It seems to forget that the figures for Rossville, which is in Georgia, must necessarily be credited to the State of Georgia, just as the figures for suburbs of Chattanooga must be credited to the State of Tennessee outside of Chattanooga, and that the

census was taken in 1900, and not in 1902.

If the Chattanooga Times wishes Chattanooga to be credited with large industrial achievements, it should devote its time to encouraging the growth of those already established there and to the creation of new ones, instead of taking flings at other Tennessee cities or of talking like an idiot about defects which do not exist. It ought to quit fooling with figures. They are dangerous.

The Times of Raleigh, N. C., alluding to an increase in capital of the Clayton Cotton Mill by borrowing \$40,000 secured by a mortgage, states that the lenders required that the trustee should be some man outside of North Carolina. This demand was due to the endeavor in the last legislature of the State to pass a bill requiring a trustee to make public a list of all persons holding securities resting upon a mortgage, and the Times adds that this act was so strongly championed that capitalists in making loans require that the distributing point shall be outside of the State. It sees no advantage in this to North Carolina. Other observers note in it a hint of the conservative attitude of capital toward communities or States in which the interests of capital may be threatened with undue interference on the part of the State.

Will Welcome Industries.

Mr. T. G. Stuart, chairman of the executive committee of the Commercial Club of Winchester, Ky., writes the Manufacturers' Record that the city council of Winchester has unanimously passed an ordinance exempting all new manufacturing enterprises started there from taxation for five years. Mr. Stuart adds: "Will you kindly say in your most excellent journal, which is doing and has done so much for the upbuilding and development of the South, that we will welcome all legitimate enterprises to our growing city, and that, in addition to an exemption from taxation, our citizens and the Commercial Club will give substantial aid and encouragement to them."

The Charleston Exposition.

Mr. Algar M. Wheeler, assistant director-general of the South Carolina Interstate and West Indian Exposition, writes to the Manufacturers' Record as follows:

"The great plan and scope of our exposition is realized by very few. Its buildings are larger than those of Omaha, Atlanta or Nashville, and the floor space in many of them equals the Pan-American. In several buildings there is yet some available space, and a few lines of manufactures are not represented at all.

"The exposition will not be fully completed or at its best before the middle or latter part of January, and the largest attendance will be in February, March, April and May, when the Florida travel will increase it. Everything points to a financial success. The attendance from 300 miles of adjacent territory will be unprecedented, as the railroad companies have undertaken to put every man, woman and child that is able to travel upon the exposition grounds at a phenomenally low rate. Board and expenses for a week will be correspondingly low.

"Many exhibitors will doubtless reap better results here than from other expositions, where visitors went for 'flying trips' and saw the exposition but once or twice. Here they will make a week of it."

During December the value of exports from Newport News, Va., was \$3,942,363, with flour leading at \$1,401,036.

AROUND MINERAL CITY.

Developments Connected with the Sulphur-Mining Industry.

[Special Cor. Manufacturers' Record.] Mineral, Va., January 7.

The first year of the new century was one of uninterrupted prosperity and development for the country contiguous to this place. Every class of industry has gone forward with vigorous strides, and farmers, miners, mechanics, laborers and merchants are in a cheerful and contented frame of mind, and looking forward with hope and faith in the future.

The most important new industry begun during the last year was a flouring mill with a capacity of forty-five barrels per day, erected at this place by the Quisenberry brothers. This mill is thoroughly equipped with the latest and most improved machinery, and will prove a great convenience to large portions of Louisa, Spotsylvania and Orange counties, as it will give a local market for wheat, and also give the farmers an opportunity to have their wheat ground into flour of the best quality.

The sulphur-mining industry was never in a more flourishing condition. All the mines have been in active operation, and the output has been limited only by the difficulty experienced in obtaining labor. Early in the year 1901 there was a strike at one of the mines, but only a small number of the men took part in the movement, and no interruption to work resulted. The trouble in obtaining labor has been due largely to the fact that men could not rent houses or obtain board. To remedy this difficulty the Sulphur Mining & Railroad Co., which owns and operates the property known as "Sulphur Mines," and also the "Tinder Flat" property, has during the past year erected a large number of comfortable and attractive cottages for the use of its employees, and also a large and commodious boarding-house, which opened with the new year. This company also has in course of erection a large two-story building, to be used as a commissary. This building was necessary to accommodate the large stock of goods carried by the company, and will be used in connection with the present commissary and warehouse buildings, the three being required to give the needed room.

The local demand for lumber has been very strong and active. The various mines require a continuous supply, and the outside demand has proved greater than the supply. Never before was the demand for labor as great or wages so good. This is one of the most favorable signs of the times, notwithstanding the complaints which it brings from the farmers.

Another indication of advancing prosperity not less certain and inspiring is the enhanced value of farming lands in this section of Virginia. This is due to two causes. The first is the marked improvement in the condition of farms in many neighborhoods. The second is a more active demand than ever before. The mere fact that their property is in demand puts new heart and hope into our farmers and stimulates them to new effort. In some neighborhoods it is now difficult to find a farm for sale, and more than one instance might be cited where farms have been sold and then bought back at a considerable advance by the original owners, who never left their property. Others could be cited of farms purchased only two or three years ago, which cannot be bought today at an advance of 100 per cent. And this is in neighborhoods remote from any town and at a considerable distance from a railroad. This shows that the advance in lands is general, and not de-

pendent upon proximity to a city nor confined to sections where fancy farming is practised.

Big Coal and Coke Operations.

Referring to the recent deals in the Pocahontas coal region, Mr. E. H. Gary of the United States Steel Corporation says:

"The properties heretofore secured by the managers of the Pocahontas coal syndicate, consisting of about 300,000 acres of the very best fuel and coking coal which has ever been discovered, and located on the lines of the Norfolk & Western Railway Co., have been sold and conveyed to the Pocahontas Coal & Coke Co., whose capital stock is owned or controlled by the said railway company, and 50,000 acres of these lands have been leased on a royalty basis to companies whose capital stock is owned or controlled by the United States Steel Corporation. There will, within the comparatively near future, be constructed at least 3000 of the most modern coke ovens with a capacity of at least 1,500,000 tons of coke, together with necessary railroads, tipples, water-works, electric plants, power plants, residences, stores and other improvements, and work will be commenced at once."

This announcement insures a very great increase in the coal and coke development of the Pocahontas region, and means an expenditure running into the millions. It is only another illustration of the southward trend of industrial interests.

The proposed consolidation of the coal interests of the New River district will probably be effected shortly, and while these negotiations are pending there are also a number of deals under way for the purchase of large tracts of coal lands in West Virginia, and now to these movements must be added the sale of the West Virginia Central and all its coal properties. Putting the sale of the Pocahontas properties at \$20,000,000, as reported, although higher figures have been named, and the West Virginia Central at \$17,000,000, and adding to this the New River and other deals practically assured, would give a total of probably \$60,000,000 as representing these investments in West Virginia coal and railroad properties.

West Virginia's Glass Industry.

[Special Cor. Manufacturers' Record.] Wheeling, W. Va., January 7.

The marvelous growth of the glass industry in West Virginia within the past year seems destined to continue at such a rapid pace that 1902 will see the State's product doubled. It was trebled in 1901. State Labor Commissioner I. V. Barton of Wheeling has returned from a lengthy inspection tour in Central and Southern West Virginia, and, in speaking of industrial conditions, said to the Manufacturers' Record correspondent:

"There is an exodus of glass manufacturers and workers from the Indiana gas belt to the cheap fuel fields of West Virginia. I never, in many years' experience, noticed such a boom in any one line of manufacture. As an evidence of the unparalleled activity of the glass trade in West Virginia, I will mention the fact that in one line, window glass, we now have seven factories, whereas twelve months ago we had not one. Cameron has a plant, Morgantown one, Clarksburg two, and one each at Sistersville, Mannington and Huntington. I have information that others are contemplated.

"In the other departments of glass manufacture great strides have been made. Many Indiana men are arranging to establish plants here. They are driven out of the Western gas belt by lack of gas.

Coal in the furnaces is expensive, and oil much more so. Thousands of inquiries have been received by West Virginia glass companies from Indiana workmen wanting positions here. It indicates the trend of matters."

The Riverside Glass Co. at Wellsburg is preparing to put in the tank system, besides increasing its six-pot furnace capacity to sixteen pots in the spring. This plant resumed operations last Monday, after a brief shut-down for repairs.

The Central Company at Wheeling is rapidly rebuilding its factory, which was burned recently, and in a month will be in operation. Fireproof buildings are being put up so far as possible.

Gas in the Great Kanawha Valley.

Editor Manufacturers' Record:

Being the owner for many years of a considerable body of land on Elk river, in Clay county, I have given my attention to the development of coal and oil and gas in the Great Kanawha valley, and as the discovery of gas is of recent date, I will say this on that subject:

Gas in the Great Kanawha valley has been abundantly proven by wells drilled within the last twelve months at Racine, in Boone county, fourteen miles from Charleston. Five producing wells have been drilled. Charleston is supplied with gas from these wells.

On the waters of Big Sandy of Elk river, not far from the line of Kanawha and Clay counties, and twenty miles from Charleston as the crow flies, four wells of the five drilled are large gas producers, one of them giving, as estimated, 4,000,000 cubic feet daily.

On the north boundary of Clay county two wells have been drilled, one of them a good producer, and on the waters of Big Laurel creek, in Clay county, some five miles northwest from the courthouse, a very neat gas well has been in a few weeks past developed.

Looking at the map of the geological State survey and the gas well marked Mercer, and drawing a line northeast from Racine, it will cross the Kanawha ten miles above Charleston as the crow flies. Racine is fourteen miles from Charleston and about seven miles from the salt wells of the Kanawha. A parallel line drawn from the wells on the Big Sandy some twenty miles from Charleston crosses the Kanawha very near the city, and a parallel line drawn from the wells in Roane county, some thirty miles from Charleston, crosses the Kanawha twelve miles below. Distances are calculated as the crow flies. And thus is proven by recent developments a gas field of some twenty-five miles in a northwest direction and some forty miles in a northeast direction, or 1000 square miles, with Charleston about the center. Is there another city in America so favorably located for an abundance of gas for many years to come. I think not. I will remark the great coal fields of Elk river have been proven by these wells on Sandy and in Clay county.

J. S. S.

Charleston, W. Va.

West Virginia Oil.

[Special Cor. Manufacturers' Record.]

Wheeling, W. Va., January 4.

The remarkable growth of the oil belt northward is the object of surprise and speculation among the well-informed oil men of the State. Less than six months ago the people in Marshall county above the main line of the Baltimore & Ohio practically had no use for oil derricks. Now the Peerless Lumber Co. of Glen Easton has orders for materials for 250 new wells, all to be drilled in the vicinity.

The recent strike of good producing wells in moderately deep territory has

stimulated the oil industry wonderfully, and there is every reason to believe that the coming few months will produce additional surprises. The line is slowly extending towards Pennsylvania, and the time is not far distant when there will be no boundary between the oil districts of the two States.

In the Wirt county field many new companies are preparing to open operations with the coming of better weather. The Barrister Oil Co. of Wheeling has determined to test its territory, which, while not large, is well located, being surrounded by light and deep sand wells in the Parish Fork field.

Huntsville Looking Forward.

[Special Cor. Manufacturers' Record.]

Huntsville, Ala., January 4.

The past year brought untold success to the manufacturers and every other line of business throughout North Alabama, Huntsville in particular. But the new year brings the tidings of a new era in the history of her great prosperity. Negotiations are pending for the location of several diversified industries, the class most needed to build up any manufacturing center. The Chamber of Commerce, Hon. R. E. Pettus, president, has accomplished the greatest work during the year that has just closed of any time since the beginning of its labor, nearly eight years ago. The business men of Huntsville have labored in season and out of season for the upbuilding of their town, and the outlook is now most encouraging. The question of most absorbing interest at this time is the securing of more railroads. It now looks that this end is near. There is a contemplated \$7,000,000 trunk-line system to pass through this city. The line is to be surveyed through the mountain and mineral lands of Kentucky, Tennessee and Alabama. Huntsville has been designated as the place for office and shops. The organization of the company, it is said, will take place this month, and during January a charter will be secured and active work will commence. New York capitalists are at the back of the scheme. The Southern Railway is making considerable improvements in its service, having only recently added the Newsboy train from Memphis to this city and return. This road is also preparing to begin the erection of a handsome depot shed at once. The North Carolina & St. Louis Railroad is also making a strong pull for the development of this section, and many fine improvements are being made in its line.

Huntsville is now one of the leading distributing points in this part of the South, and her manufacturing importance is rapidly becoming known. There are now nine cotton mills here, all of them in operation except one, and it will start up so soon as it can be completed. The spoke and handle business, carriage manufacturing, foundries, machine shops, fiber factories, shirt mills and other such industries are all important factors in the make-up of this city.

The business men of the city have two strong things in view for the coming year—a campaign for new industries and the location of Northern immigrants, and a systematic campaign throughout the State for education. Not only Huntsville is enjoying textile prosperity, but there are several other thriving towns along the line of Southern Railway, chiefly Decatur, Tusculum, Sheffield and Florence, all experiencing a wonderful growth, which is attributed to the untiring efforts of the business men of the respective places. At Sheffield the Southern shops are rapidly going up; an electric-light plant and water-works system are to be put in, together with the construction of

\$20,000 worth of new houses. Each town is a friendly rival of the other, every one being proud of its neighbors' success. This is a helping feature that is watched by all Alabama cities.

There is another great industry that is growing in this part of the State. There are six large nurseries in this (Madison) county, and another is being established. The fruit-growing industry and farming are two of the chief elements that keep Huntsville so prominently in the eyes of the world. The richness of soil, delightfulness of climate and other conditions make this possible.

Hon. R. E. Pettus, president of the Huntsville Chamber of Commerce, is in correspondence with parties who desire to locate a new furniture factory in this city for the manufacture of the cheaper grades of furniture.

Architect Herbert Cowell has prepared plans for the \$20,000 opera-house proposed for this city.

Opportunities at Gadsden.

[Special Cor. Manufacturers' Record.]

Gadsden, Ala., January 6.

Gadsden is situated at the southern extremity of Lookout mountain, and on the west bank of the Coosa river, ninety-two miles south of Chattanooga, Tenn., 190 miles west of Atlanta, and sixty-nine miles north of Birmingham, in the richest mineral section of Alabama. The city offers many advantages to manufacturers. There are ample railroad facilities. The Louisville & Nashville, the Nashville, Chattanooga & St. Louis, the Southern and the Chattanooga Southern enter Gadsden and handle its increasing business. There is also an electric car line running from Gadsden to Attalla, a distance of five miles, passing through Alabama City, a prosperous town of 3000 people. In the nearby country many peach orchards have been started, and many carloads of fine peaches have been shipped to Northern markets. Strawberry-raising is also successful. One farmer cleared one acre, set out plants, and one season afterward realized \$350.

Gadsden is furnished with water from the Coosa river by pumps, which force the water to an altitude of several hundred feet into a large reservoir situated on the mountain, from which the water is filtered with the latest and most complete filters.

The best molding sand can be found anywhere in inexhaustible quantities within the corporate limits of Gadsden. Fine building stone can also be obtained here.

There are several manufacturing concerns already here, and excellent opportunities are offered to others desiring to come here.

Gadsden has a live, wide-awake Commercial Club ready and willing to assist all bona-fide manufacturing enterprises that may desire a Southern field. The money interests of the city are not backward in taking stock in enterprises, and all the industries in Gadsden are backed by local capital.

The secretary of the Commercial Club, Mr. A. T. Stocks, will give any information that is desired, and everyone will be accorded a hearty welcome to one of the coming manufacturing towns of the South.

I. S. FIELD.

To Help Manufacturers.

Mr. J. M. Abbott of Seguin, Texas, writes to the Manufacturers' Record that local co-operation will be given to anybody establishing there a knitting factory and a bed-comfort factory. He adds that Seguin, which is thirty miles east of San Antonio, handled last year 37,000 bales of cotton, and that home people promoted

the establishment of the Seguin Compress Co., with F. C. Weinert, president, and the Seguin Milling & Irrigation Co., with James T. Holmes, president. All of the stock of the first company was subscribed at Seguin, and land for a site has been purchased and arrangements have been made for the purchase of a new press. The second company, which has a capital stock of \$50,000, owns a 10-foot waterfall on the Guadalupe river four miles west of Seguin, and its plant is connected by a mile of side-tracking with the main line of the Southern Pacific. The company will operate an ice plant of seventy-five tons capacity. On January 10 a Chicago gentleman is expected in Seguin regarding plans for a brewery.

A Tribute to the Trackwalker.

[Staunton (Va.) News.]

The way the mountain divisions of our Southern railroads have withstood the onslaughts and underminings of the recent floods furnishes a gratifying object-lesson for the instruction of those who are unappreciative of the benefits our people are deriving from the vast sums of money which, during the last few years, have been invested in the practical reconstruction of our leading lines, such as the Chesapeake & Ohio and the Southern.

Ten years or so ago a rain like the one that has just flooded the country all the way from Virginia to Alabama would have wrought such wreck and ruin that travel and traffic would have been indefinitely suspended, to the public's unspeakable loss and inconvenience. But so effective are the safeguards provided by rebuilt bridges, raised roadbeds, widened cuts, enlarged culverts, as well as by modern mechanical appliances, that instead of weeks of stoppage, few trains have been delayed longer than the time necessarily lost in prudent slowing up.

To one familiar with the "tricks and manners" of the mountain stream which an inch of rainfall may change from a trickling rill to a raging river, the wonder is that despite all these improvements and betterments, the recent two to four-inch midwinter downpour has done so little damage. With the exception of the rock-slides near Lynchburg, which no human foresight could have anticipated or prevented, not a train has been wrecked nor a life lost along the hundreds of miles of railway threading the valleys and canons of the South Appalachian ranges.

But much as we owe to the capitalist and wide-awake managers who have physically revolutionized our railroads, we owe at least the meed of praise to the skill and fidelity of the men who have in their keeping the life of every traveler. Some of these have got scant recognition and scant thanks. It has grown to be a custom of the Presidents of the United States to take off their hats to the faithful engineers who have landed them in safety at their journey's end. But few even among them who spend half a lifetime on the rail give so much as a thankful thought to that unseen army whose ceaseless track tramp means more in the way of safety-insurance than the skill and vigilance of either the man on the engine or the man at the "block." Whatever may be the merit or mettle of trackwalkers on other lines, I happen to know that those on our own C. & O. are of the "true-blue" kind, all picked and tried men. By reason of keen-sighted vigilance and conscientious sense of responsibility, they deserve to be greeted with hats off by the great traveling public, from the President of the United States to the humblest citizen. So here's a Happy New Year to those faithful "watchmen of the night," the trackwalkers of Virginia's railroads!

THOMAS P. GRASTY.

NOW IS THE TIME TO ACT.

Strong Demand for Technical Training of White Boys.

The Arkansas Democrat of Little Rock publishes a strong plea for provision for the technical training of white boys of the State. It says:

"The Board of Trade has received a pamphlet copy of the celebrated speech made by Mr. Richard H. Edmonds, editor of the Manufacturers' Record, before the annual convention of the Southern Cotton Spinners' Association at Atlanta on the 14th of November last. One cannot but wish that a copy of it could be read by every man in Arkansas. The subject is 'The South's Industrial Task: A Plea for Technical Training of Poor White Boys.'

"And in the whole State of Arkansas there is not for white boys a manual training school. There are several for the colored.

"Is it proposed that the white boys shall be handicapped in the struggle for existence?

"Is it not the duty of every man whose interests are in Arkansas to personally use his efforts to see to it that a school of this character is established in Arkansas by the next general assembly? They exist in the neighboring States.

"In a leaflet inclosed in the pamphlet Mr. Edmonds says:

"Are the people of the South in earnest in desiring to aid the technical training of poor white boys? Are they willing to do even in part for the poor white boy what Northern philanthropists are doing for the industrial training of the negro? If so, will they aid the South's technical schools in their work by contributing to the support and education of poor white boys in the way suggested in the accompanying pamphlet? Briefly, this plan is that 1000 or more Southern business concerns or individuals shall each contribute \$125 or more a year for four years to give a technical education to 1000 poor boys, the boys binding themselves to repay the money after graduation, so that the same fund could be used for aiding others. Thus every contributor, in effect, founds a perpetual scholarship. The contributions should be made to one or more institutions located in the State in which the donor lives.

"This plan received the hearty endorsement of the Southern Cotton Spinners' Association. Won't you study it, and if you or any institution with which you are connected are willing to join the list of men or institutions ready to prove by their works their desire for the broadest help to the poor white boys of the South, as well as to do the greatest good for the advancement of the South, by agreeing to subscribe \$125 or more a year for four years to aid in this work, will you notify the president of one of the technical schools in your State, to whom the money should be paid, and at the same time advise the Manufacturers' Record of Baltimore, in order that a full list of contributors may be published as a roll of honor of Southern men and Southern institutions."

"In the foregoing Mr. Edmonds urges that the contributions be made to institutions in the State in which the donor lives. He does not comprehend in this particular how far we are behind the times, and to what extent our legislators are neglecting one of their highest duties. Before another year rolls around arrangements must be made that will secure the much-needed school for our boys.

"We cannot hope to take advantage of our great natural wealth, the raw materials, unless we can fit the boys to handle them. Our cotton, minerals and timber, the wealth given us by nature, is going

from us for nominal sums, and going to the North and East because we have not the factories, and factories we can never have without skilled labor. In the words of Mr. Edmonds, 'our very salvation, industrial and social, lies in adequate provision for rendering available our human material, so full of potentialities for good of every kind.'

PRACTICAL EDUCATION NEEDED.

Self-Help a Necessity for Thorough Development.

Editor Manufacturers' Record:

If I had imagined for a moment that my letter to you might have had some general interest, I should have thrown it into a literary form. At the same time, I am to be congratulated that the views I have expressed are in harmony with men like yourself, who have studied this important problem on the ground and are informed of the facts from the facts, and not from mere letter-press.

If in the country schools all through the South such works as "New Plants Grown," "New Plants Fed," "Animal Industries," could be substituted for the skimming, shallow literary works and hard analyses of the present regime, a scientific interest in things would be stimulated. Then, if through the influence of the friends of this movement some people of wealth would give a plantation or a part of one in many a district to be turned into a working school, the pupils learning "the how" with their hands and the dexterity by practice, and "the whys" by word of mouth, as the apprentices of old did in the arts, we should form a body of capable, thinking agriculturists who can do, and not merely lecture how to do with their hands in their pockets. I feel sure that this would be possible in many directions. You have the wealth in the soil; surely the capacity can be created to produce it. The question with these boys is to find their work, and not drone away their lives, leaving their country as poor as they found it. A large immigration is going to set in from the North and West. For individual effort, we are filled up here. Are they, the Southern boys and rightful possessors of the soil, to be swept aside in the struggle of the survival of the fittest? Let us all put our shoulders to the wheel and decide to do the right thing. If these boys have the grit and stubbornness of the Anglo-Saxons, they will be ready to do their share. Any attempt to pauperize, to carry on any system of training at the expense of independence and self-respect, is not only undermining to the character of the individual, but it is an entirely wrong basis where sustained effort is the one point to be in training for and towards. Every boy receiving a scholarship ought to begin the active manual effort to help himself as a condition. Then we make a man, besides making a possible expert. It is easily demonstrated how so many hours of real work a week, whether on the farm, the creamery, the electric work or the mill or mine, give a grasp of what men are doing and may be rightfully required to do, which no amount of book work could bring within their reach, and the moral gratification of earning, of striving, of making the effort, of gaining courage and self-reliance, and the delight of it all, is half the victory.

Just twenty years ago I returned from an expedition in the Arctic. I know what effort means and the sensation of surmounting difficulties, and hunger, too.

Regarding agricultural education, I have only to point to France now and France under the stupid, benumbing influence of the Church, with its propaganda, that this is a "vale of tears," and

we're only here for a short probationary time. I said to a French peasant: "I would like a bit of something to eat." "Oh," said the daughter, "we've nothing to offer the gentleman. There's no meat in the house, but there are some eggs, and I can kill a chicken, and there's some fresh salad and butter and bread cakes, white and brown, and (added the father) a jar of wine."

This on four acres of land— toil, thrift and plenty.

OCTAVIUS I. BATES, F.R.G.S., F.R.H.S.
Oakland, Cal.

Industrial Training in Texas.

Mr. V. W. Grubbs of Greenville, Texas, chairman of the State committee on industrial education, writes:

"I have read with much interest your speech delivered in Houston, Texas, on the 12th of November last, in which you give a most favorable, though not an extravagant, estimate of the resources and possibilities of our State. I note with satisfaction your reference to the educational advantages of Texas, based upon its princely permanent school fund, and your timely suggestion that our people should lead in the establishment of an efficient system of technical and industrial training. I beg to inform you in that regard that in the early part of the year 1899 an organization was formed in Austin having for its purpose the awakening of public sentiment to the immediate and pressing necessity of the education of our youth along industrial lines, looking to their preparation and qualification for the duties and responsibilities incident to the great industrial movement which had recently been inaugurated for the development of the resources of the State. The people have everywhere responded to the effort, and there is now no doubt that the next legislature will take hold of the matter and make liberal provisions for such training as a part of our public free-school system.

"The State Teachers' Association, recently in session at Waco, endorsed the movement and appointed a strong committee to act in conjunction with our committee and other organizations in the formulation of a plan and urging the same before the legislature. The Texas press has contributed inestimably to the success of the committee."

Shipbuilding for New Orleans.

A shipbuilding plant capitalized at \$150,000 will be established at New Orleans, the enterprise having been announced during the past week. It will be equipped by a company now organizing and only waiting the completion of legal formalities to commence the work of construction. R. C. Wilson is the prime mover in the company, and will be its engineer. Mr. Wilson has designed a boat especially for operating in the shallow waters through Lake Borgne canal, Lake Borgne and the Mississippi sound, up Mobile bay and the rivers flowing into it from the Alabama coal fields, and this boat will be a specialty of the new yards. Capts. Alex. M. Halliday, who is to be the company's president, W. G. Wilmet and Walter Verlanders are interested.

Two More Elevators.

Advices from New Orleans are that the Illinois Central Railroad Co. will probably construct two additional elevators at its terminals on the Mississippi river. One will be near the Stuyvesant docks. The plans include what is known as a drying elevator of 150,000 bushels capacity, while the other, if built, will be a storage elevator, which will considerably increase the "house" facilities of the Illinois Central at this point.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

NEW SOUTHWESTERN LINES.

Continued Activity in Railroad Construction in Texas and the Territories.

The Manufacturers' Record has received official advices of three very important systems which are to be built as soon as possible. The Ozark & Cherokee Central Railroad, extending from Fayetteville, Ark., to Lincoln, I. T., a distance of twenty-one miles, is to be expanded into a system 200 miles in length, reaching from Fayetteville to Shawnee, Okla., connecting with the St. Louis & San Francisco system at its southern terminus. The project is being carried out by two companies. The Shawnee, Oklahoma & Missouri Coal & Railway Co. will build from Muskogee to Shawnee, while the Ozark & Cherokee Central Company will complete the mileage from Muskogee to Lincoln. All of the contracts for the work have been let, the Kenefick Construction Co. of Kansas City being the general contractor. Tracklaying is now in progress between Lincoln and Muskogee. Both lines are practically owned by the same syndicate, which includes a number of Iowa capitalists, H. W. Seaman of Clinton, Iowa, being president. Mr. Seaman officially confirms the above statement.

The Orange & Northwestern Railroad Co., which was recently completed between Orange and Buna, Texas, a distance of thirty miles, is to form the nucleus of a network of roads in the eastern part of the State, terminating at the cities of Marshall and Corsicana. Mr. John W. Maxey, assistant to the president of the promoting company, informs the Manufacturers' Record that surveys are to be made immediately from Buna to Marshall and from Buna to Corsicana with a view to letting contracts as soon as possible. When the plans are completed the system will be 355 miles in length.

G. A. Human & Co. of Cleburne, Texas, are promoting another line in the northern section of the State between Cleburne and Fort Worth. Mr. Human writes that the line will be twenty-eight miles in length, and that a proposition has been made to the people of Cleburne, which is now under consideration. Right of way has already been secured.

Altogether, these three projects will add 532 miles to the railroads in Texas and the Territories when completed.

New Line to the Gulf.

A system which, if completed, will connect Memphis with the Gulf coast at Mobile, Ala., has been planned to be built through portions of Alabama, Mississippi and Tennessee. The promoting company, which is entitled the Memphis & Mobile Railroad Co., has already begun the work of surveying the northern portion between Hattiesburg and Memphis. The route selected is by way of Grenada, and it is stated that construction is to begin at once between Hattiesburg and Grenada, a contract having been given to Geo. Arnold & Co. of Memphis, Tenn. The Mobile, Jackson & Kansas City road will be completed between Mobile and Hattiesburg in a few weeks, and it is understood may form the southern portion of the new system, which will be about 300 miles in length.

The promoters of the line have organized by electing Mr. Chester H. Pond of Moorhead, Miss., president. Others interested are Messrs. Adam M. Byrd of

Philadelphia, Wm. T. Allen of New York and Edward H. Thomsen of Baltimore. Mr. Thomsen is senior member of the banking firm of E. H. Thomsen & Sons. Mr. Pond is well known in connection with railroad promotion, having constructed the Yazoo Delta Railroad, which now forms a portion of the Illinois Central system. He is also prominently identified with the industrial development of Mississippi. Mr. Byrd is understood to be largely interested in pine and hardwood lands along the line of the railroad. President Pond is quoted as saying that the mileage between Hattiesburg and Grenada is to be completed within the next twelve months. At Grenada a junction would be formed with the Illinois Central system, thus affording the Central a very desirable route to Mobile and adding this port to its seaboard terminals should it become interested in the Mobile & Memphis and the Mobile, Jackson & Kansas City. Several months ago officials of the Illinois Central made an examination of the Mobile, Jackson & Kansas City, and at that time it was reported the latter would be absorbed by the former company.

Demand for Rolling Stock.

An idea of the extent of the freight traffic in the Southwest is given in a recent statement made by Mr. J. W. Maxwell, general superintendent of the Missouri, Kansas & Texas system. Referring to the purchase of rolling stock, Mr. Maxwell said:

"We bought 1000 new coal cars this year, but as we have to furnish the cars to haul coal to several other railroads which are using more coal than usual, we have been crowded for equipment. The greatest difficulty is in providing power. It is due to the large increase in traffic. We have placed orders every year for about the number of engines which we thought we would need. This year it seemed to us that twenty-two would be ample, but we kept on placing additional orders until thirty-seven have been delivered to us. We could use more, but can't get them. We have ordered thirty-three engines for next year, which we think we will need if business keeps up. One of the locomotive works advises us that they already have orders booked for 1600 engines to be delivered next year. This will keep them turning out an average of five engines a day during the year. So it will be understood that it is no easy thing to secure locomotives to meet unexpected conditions, and it will be further understood that it is no small thing when one road purchases thirty-seven locomotives at a cost of \$500,000. The traffic this year, on account of the smaller proportion of cotton and cottonseed products, is producing less revenue than last year, although the tonnage is larger."

Millions for Improvements.

The Houston & Texas Central Railroad Co. has planned a number of very important improvements for the present year. They include the extension, which has been under consideration, from Burnet to Lampasas, a distance of twenty-four miles; the relaying of 100 miles of the main line with 80-pound rails, and the erection of new depots and bridges at several points on the main line and branches. The cost of the Lampasas extension is estimated at \$400,000, and the relaying of the main line at \$500,000. The outlay for new buildings will be \$90,000, bridges \$25,000 and water stations \$12,500. The company has also decided to purchase twelve locomotives at a cost of \$102,000, and ten chair cars to cost \$71,000.

The appropriation of \$3,797,000 recently made by the Southern Pacific Rail-

way Co. for improvements includes the expenditure of \$518,000 for rails, with the necessary ties. It will expend \$288,000 in new depots and other buildings, \$19,000 for fencing, and has appropriated \$715,000 for locomotives and \$1,197,000 for cars.

Another Alabama Project.

A company has been organized to take up the plan of building a railroad between Montgomery and Tallapoosa, Ala., a distance of 135 miles. It includes a number of New York capitalists, and has elected George O. Vanderbilt of Princeton, N. J., president; Hon. William H. Martin of Frenchtown, N. J., vice-president, and Albert E. Vanderbilt, treasurer. Hon. W. W. Summerlin, mayor of Tallapoosa, is general manager. Mr. Martin is president of the Union National Bank of Frenchtown. The directors of the railroad company include A. B. Haring, cashier of the same institution. The route of the proposed road is through a country which is said to be heavily timbered, and the promoters of the railroad, it is understood, have secured control of about 300,000 acres of pine lands in the vicinity of the right of way.

Suffolk & Carolina.

The announcement is made that the Suffolk & Carolina Railroad is to be changed from narrow to standard gauge. This line, which was built several years ago from Suffolk, Va., to reach timber tracts in Tidewater Virginia and North Carolina, is now being extended to Edenton, a distance of fifty miles from Suffolk, where connection will be made with steamers on Albemarle and Pamlico sounds. With the improvements contemplated, the Suffolk & Carolina Railroad will interchange its traffic with the several railroad systems reaching Suffolk. Its increase in freight business has caused the plan to be decided upon. The road is practically owned in Baltimore, the president of the company being Mr. William H. Bosley, who is also president of the Queen Anne's Railroad.

To Build in Mexico.

Dispatches received in Kansas City are to the effect that the Kansas City, Mexico & Orient Railroad Co. has secured the capital in England to complete the Mexican portion of the system, and that already contracts have been made for rails for 600 miles of the line. Mr. A. E. Stilwell, president of the company, has been in London for some time in the interest of the road, and it is understood that subscriptions to the capital stock of the company aggregating \$2,500,000 have been secured from English capitalists.

To the Tennessee Copper District.

The Dalton & Alaculsky Railroad Co. has determined to reach the copper mines in Eastern Tennessee, and the Manufacturers' Record is informed that an extension will be built to Ducktown, for which surveys are now being made. The extension will be forty-four miles in length. The road is under construction between Dalton and Alaculsky, Ga., and is being built by a Northern syndicate of which M. S. Squires of Binghamton, N. Y., is president.

Railroad Notes.

It is reported that a syndicate of Memphis parties, including F. G. Jones and John Armistead, are considering the purchase of the street-railway system of Nashville, and have recently been examining the property to estimate its value.

A company has been chartered in Tennessee to build what is to be known as the South & Western Railway, with

\$100,000 capital stock. The route is from a point on the Tennessee and North Carolina line through a portion of Unicoi county to the line between Virginia and Tennessee. S. J. Kirkpatrick and Tate L. Earnest of Johnson City are among those interested.

The plans of the International & Great Northern Railroad, as thus far announced for the present year, include the purchase of a number of additional tank cars to carry oil, at an expense of \$65,000, and the expenditure of \$588,000 for various improvements, including a new passenger station at San Antonio and a freight depot at Palestine. The company also announces that it will change thirty additional locomotives to burn oil for fuel.

Baltimore capital will be extensively invested in the railway system being constructed in London by the syndicate of which Mr. Charles T. Yerkes is at the head. The Maryland Trust Co. of Baltimore, which is taking an active interest in the project, also Messrs. Alexander Brown & Sons and Col. J. Willcox Brown, president of the Maryland Trust Co., have subscribed to amounts of stock ranging from \$100,000 to \$400,000 par value.

Galveston and London.

A Galveston dispatch is to the effect that the Cuba Steamship Co., which has its principal offices in London, has determined to operate a monthly service between London and Galveston, and will probably call at Havana en route. The first vessel will sail from Galveston in February, Messrs. J. Moller & Co. being the Galveston representatives. The exports by this line will include cottonseed meal, flour and lumber, and it is stated the company has made a large contract with Western flour mills for products which will be shipped during the present year.

Waco, Texas, is one of the most widely known communities in the United States, on account of its remarkable growth and general prosperity. An excellent idea of Waco's present and future is given in a little book which has been issued, entitled "Waco, the Central City of the Lone Star State." The pamphlet is illustrated by half-tone and other engravings, showing public buildings, business and manufacturing enterprises, as well as sections of streets, and contains statistics giving extent of population, improvements and various industries. The portion of the Southwest of which this city is the market is also described. Among the industries which have contributed to the reputation of the community is the Slayden-Kirksey Woolen Mills. To the enterprise of this company is due the publication of the booklet referred to.

A dispatch from New Orleans states that at the official test of the new government dry-dock there, which was built at the Maryland Steel Co.'s works at Sparrow's Point, the battleship Illinois was raised in one hour and fifty-six minutes, which is regarded as a remarkably fast record.

H. & W. Patarky of Berlin write to the Manufacturers' Record that as there is still in Russia an indirect bounty upon Russian produced sugar, there is in that empire a large opening for centrifugal machines.

The sales in the Joplin (Mo.) district during the past week were 8,268,930 pounds of zinc ore and 1,433,140 pounds of lead ore, valued in all at \$147,885.

City Engineer Clayton of Atlanta reports that during the past year \$3,649,656 were spent in permanent improvements in that city.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

New England Cotton Manufacturers.

The transactions of the New England Cotton Manufacturers' Association, at its semi-annual meeting at Niagara Falls last September, have been published in book form under the able editorship of its secretary, Mr. C. J. H. Woodbury. The publication includes, in addition to the running debates in the meeting, the speeches of Mayor Mighells B. Butler of Niagara Falls, welcoming the association; of President Chas. H. Fish of Dover, N. H., and of President John G. Milburn of the Pan-American Exposition, and papers of Dr. Robert H. Thurston of Cornell University, on the relations of manufacturing industries to national position and progress; of H. H. Fukuhara of Tokio, Japan, on the past, present and future of the cotton industry of Japan, which, by the way, is interestingly illustrated; of Phillip P. Barton of Niagara Falls, describing the plant of the Niagara Falls Power Co.; of Henry K. Kittredge of Boston, on the cotton fiber in some of its phases; of Wm. F. Southworth of Lowell, Mass., on the round bale at the mill; of Edward W. Thomas of West Durham, N. C., on the overworking of cotton in the cardroom; of Samuel Webber of Charlestown, N. H., on cotton waste; of Lewis T. Houghton of Worcester, Mass., on thread boards and guides; of Albert Diabell of Lowell, Mass., on the cotton industry in the United States; of Frank P. Bennett, Jr., of Boston, on the evolution of the slubbing frame; of H. F. J. Porter of New York, on steel forgings for factory engines; of D. A. Tompkins of Charlotte, N. C., on early Southern cotton mills; of Wm. Wittam, Jr., of Woonsocket, R. I., on the possibilities of trade expansion in cotton manufactures; of Col. E. D. Meier of New York, on modern boiler problems. The New England Cotton Manufacturers' Association has now four honorary members, 142 associate members and 515 active members. Of 661 total membership, seventy-eight are Southern men.

Shepperson's Cotton Facts.

Col. Alfred B. Shepperson of New York, the well-known cotton statistical expert, has issued his December (1901) edition of "Cotton Facts," which brings down to the close of the cotton season of 1900-1901 all the valuable statistics of his previous issues dealing with crops, receipts, exports, stocks, home and foreign consumption, visible supply, prices, acreage of cotton in the United States and other countries. Following a general review of the past season with a forecast for 1901-1902, Colonel Shepperson presents among his special features articles on the progress of cotton manufacturing in Europe, the United States and India since 1890, on the quantity of American cotton brought into sight and taken by the world's spinners each month since 1894, on the new irrigation works in Egypt, on cotton manufacturing in Japan, on the baling of American cotton, on the culture of Egyptian and Peruvian cottons with reference to their consumption in the United States, and on the Mexican cotton-boll weevil. "Cotton Facts" is a product of wide information and unpar-

ing pains to obtain correct facts about every subject treated within its covers, and is an absolute necessity to everybody who wishes to keep abreast of widespread developments in cotton growing and cotton handling.

A \$500,000 Plant Progressing.

Steady progress is being made on the construction of the plant of the Glenn-Lowery Manufacturing Co. at Whitmires, S. C. This enterprise is capitalized at \$500,000, and will have for its initial equipment 25,000 spindles and 800 looms for the manufacture of fine sheeting and print cloth. The main building is four stories high, 126x480 feet, and is planned for extending, so that the initial machinery can be doubled at a minimum cost. Power will be generated through a steam-driven electrical plant, and then distributed by means of direct-connected electrical motors. A hot-blast system will heat the plant; an automatic sprinkling system will also be in position. The entire plant and its accompanying mill village will be modern in every respect. William Coleman is president.

Great Falls Company's Betterments.

Great Falls Manufacturing Co. of Rockingham, N. C., mentioned last week, has contracted with the D. A. Tompkins Co. of Charlotte, N. C., for engineering its proposed improvements, that are to cost from \$35,000 to \$50,000. These improvements will include the installation of steam-power plant, fire-protection equipment, electric-lighting system, freight elevators, etc. Contract for this machinery has not yet been awarded. The plant is equipped for manufacturing coarse sheetings, and as soon as the company ascertains the exact capabilities of the machinery it expects to add 4500 spindles and make finer goods. The spindles now number 3500.

Spartanburg County Mill Dividends.

The cotton-manufacturing companies of Spartanburg county, South Carolina, have enjoyed a most prosperous business during the year 1901, as is evidenced by the facts announced in a dispatch from the town of Spartanburg. The dispatch presents a number of financial statements, from which is gleaned the fact that thirteen companies, operating more than 400,000 spindles and over 12,000 looms, have authorized the payment of dividends aggregating \$228,988. The aggregate capital of these companies is \$5,073,000, and their dividends ranged from 3 to 5 per cent., averaging more than 4 per cent.

A \$50,000 Woolen Mill.

The Ajax Textile Co. has been organized at Weatherford, Texas, for the purpose of establishing the woolen mill and camel's-hair press-cloth mill lately mentioned as to be erected in that town. Officers have been selected as follows: President, G. M. Bowie; vice-president, R. H. Foat; secretary-treasurer, C. D. Hartnett; general manager, A. F. Parker, and directors, Messrs. George P. Levy, L. M. Bailey, John R. McKenzie and W. T. Ivy. Work on buildings is to be commenced at once, and machinery will be in position by March 1. The capital stock is \$50,000.

The Cotton Movement.

In his report for January 3 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during the 125 days of this season was 6,727,694 bales, an increase over the same period last year of 76,108; the exports were 3,643,014 bales, an increase of 368,576;

takings by Northern spinners 1,026,511 bales, a decrease of 102,753 bales; by Southern spinners 713,111 bales, an increase of 99,493 bales.

Textile Notes.

During 1901 the gross receipts of cotton at New York were 1,363,766 bales.

Norris Cotton Mills of Catachee, S. C., has declared a 4 per cent. dividend on its \$200,000 capital.

Anderson (S. C.) Cotton Mills has declared a semi-annual dividend of 4 per cent. on its \$500,000 capital.

B. L. Battle Manufacturing Co.'s knitting plant at Warrenton, Ga., was destroyed by fire during the week, entailing the loss of about \$30,000.

Laurens (S. C.) Cotton Mills has declared a semi-annual dividend of 5 per cent. The company is capitalized at \$350,000, and has 40,320 ring spindles and 1188 looms in its plant.

Birmingham (Ala.) Cotton Manufacturing Co.'s plant of 5000 spindles was sold during the week under a decree of court. Delaware County National Bank of Chester, Pa., purchased the property at \$28,125.02.

Bluff City Cotton Mills at Memphis, Tenn., will be sold January 15 to parties who intend to reorganize the company and plant and put the mill in operation. There are 10,000 spindles and complement in position now.

Texas Hosiery Manufacturing Co. of San Antonio, Texas, is installing fifty machines, which will be in operation within thirty days. Messrs. M. G. B. Thomas and F. D. Kamman are interested in the enterprise.

Dublin (Ga.) Cotton Mills is now receiving the final shipments of the machinery for its plant. The spindles will number 5000 and the looms 160, for the production of fine sheetings. The company is capitalized at \$100,000.

Cedartown (Ga.) Knitting Co., reported incorporated last week, states that its organization does not mean the erection of any new mills, but is merely a combination of mills already built and equipped. J. Wright Adamson is secretary.

The committee that has been soliciting subscriptions to a cotton-mill company at Brenham, Texas, announces that \$90,000 has been signed for. Permanent organization will be effected soon. D. C. Giddings, Jr., is among those interested.

Willingham Cotton Mills of Macon, Ga., has increased capital from \$100,000 to \$150,000, the additional funds to be expended for the purchase of the 4000 additional spindles and 120 looms reported recently. A building is ready to receive this equipment, and it will be placed at once.

Chamber of Commerce of Chattanooga, Tenn., has received a proposition for the establishment of a \$300,000 cotton factory. A party formerly connected with a Chattanooga mill makes the proposition and offers to invest half of the required amount. An effort will be made to organize the company.

Loray Mills of Gastonia, N. C., has started a portion of its machinery, and expects to have 25,000 spindles in operation by March. Five hundred operatives will be required to run the first instalment of spindles. The full complement will be 50,244 spindles and 1580 looms when all the machinery is in position.

The Wetmore Development Co., recently incorporated, has organized, with S. G. Finley, president and treasurer; S. M. Wetmore, vice-president, and G. R. Rembert, secretary. The company will establish at Spartanburg, S. C., a plant

for manufacturing the stop-motion for drawing-frames invented by Mr. Wetmore.

Southern Manufacturing & Mill Supply Co., capitalized at \$50,000, has been incorporated by Messrs. Harry E. Hansen of Gaffney, S. C., and Thorwald Hansen of Everett, Mass. This company has completed its factory, mentioned several weeks ago, and will manufacture roving cans, mill boxes, baskets, trucks, and other supplies for textile mills.

Reports from Rock Hill, S. C., credit the cotton mills there with making satisfactory profits during 1901. Manchester Cotton Mills, capital \$147,000, declares semi-annual dividend of 4 per cent.; Arcade Cotton Mills, capital \$98,700, also 4 per cent. semi-annual. Highland Park Manufacturing Co. does not name any figures, but states its profits were about equal to those of the previous year.

Woodstock Cotton Mills of Anniston, Ala., has completed its addition for packing-room purposes, same containing 500 square feet. A 400-horse-power boiler is being installed, increasing the plant's steam-power capacity to 800 horse-power. The company recently completed its improvements to double its 5260 spindles and complement, and now has the additional machinery operating with a daily production of 7000 pounds of yarn.

Moultrie (Ga.) Cotton Mills is proceeding with the construction of its additional building, and expects to complete it by February 1. Order has been placed with the Lowell (Mass.) Machine Shops for 120 looms, which will increase the total to 280, and by operating the carding and spinning departments day and night these looms will be supplied; the spindles number 5000. The production will be increased about 75 per cent. by these improvements.

High water and ensuing floods caused a damage of nearly \$100,000 last week to the dam and machinery of Anderson (S. C.) Water, Light & Power Co. The disaster was entirely unexpected, the dam having been pronounced by competent engineers as strong enough to withstand any possible overflows; dam was 700 feet long, 44 feet high, 30 feet wide at base and 8 feet wide at top; about 150 feet of this in the center was washed away. The power developed was transmitted electrically to a number of industries. One of these industries was the Anderson Cotton Mills, employing 1300 operatives, and this company, by the aid of a 300-horse-power steam plant, which it has, will be enabled to employ 600 of its hands. Many of the employees are already going to other sections to find employment until the damage at Anderson can be repaired. Orr Cotton Mills employed 500 operatives, and, unless the company decides to install boiler and engine temporarily, will have to remain idle until the dam is rebuilt.

The total pig-iron shipments from Alabama and Tennessee during 1901 were 1,554,932 tons, of which 22,149 tons were for export. The cast-iron shipments were 162,343 tons. There was an increase in pig-iron shipments over 1900 of 226,992 tons, and of cast-iron-pipe shipments, 73,393 tons.

The Meldrum Camphor & Chemical Co., which has recently been organized to manufacture chemicals at Blakeshear, Ga., has also decided, it is said, to manufacture a starch from the cassava plant.

The census bureau has issued a bulletin showing that the value of manufactured products in Tennessee in the census year was \$107,527,060, an increase of 48 per cent. since 1890.

COTTONSEED OIL.

This department is open to the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

Cottonseed-Oil Notes.

The Morgan Cottonseed Oil Mill, just erected at Morgan, Texas, commenced crushing seed on the 30th ult. The machinery worked admirably, and the outlook for business is quite encouraging. The mill is on the Texas Central Railroad, and has a capacity of forty tons a day.

The Transatlantic Trading Co. of Galveston, Texas, reports the shipments of cottonseed products from that port for December, 1901, as follows: Cottonseed meal 15,240 tons, and cottonseed cake 7855 tons. The same company reports the shipments from New Orleans for December, 1901, at 7445 tons of cottonseed meal and 19,875 tons of cake.

The following quotations were made on the 6th inst. at Galveston by exporters for cottonseed products: Cottonseed oil f. o. b. Galveston in barrels, prime refined, 38 cents, and prime crude, loose, f. o. b. Texas mills, 33½ to 34 cents, January; prime cottonseed cake, \$26 per short ton, and prime cottonseed meal, \$25.50 f. o. b. Galveston, January; linters, choice, compressed, 3½ cents; A, 3 cents, and B, 2½ cents, f. o. b. Galveston.

With the opening of the new year the cottonseed-oil mill at Jacksonville, Fla., has commenced operations. The plant is not yet in operation both night and day, but will be shortly. Everything about the works is in first-class order, and the mill has a daily capacity of eighty tons. The company owning the mill is composed of Tennessee capitalists, who also own another mill near Tallahassee. C. N. Henderson of Chattanooga is president of the company.

The plant of the McNally Manufacturing Oil Co. at Norfolk, Va., is now completed, and commenced operations last week. The first two months will be employed in crushing cottonseed at a rate of eighty tons per day, making about 2150 gallons of oil a day. After this run the plant will crush castor beans and flaxseed. The two companies, the McNally Manufacturing Oil Co. and the Cotton Oil & Fiber Co., expect to keep on hand and feed about 1000 head of cattle when the business is developed.

The movement in cottonseed products from the port of New Orleans last year shows a considerable gain over the business of 1900. In 1901 the exports of cottonseed cake and meal from that port amounted to 502,868,680 pounds, valued at \$5,442,969, against 453,221,175 pounds, valued at \$4,786,368 in the year 1900, a gain in favor of 1901 of 48,447,505 pounds. Shipments of cottonseed oil for 1901 amounted to 13,109,022 gallons, valued at \$4,203,086, against 11,407,750 gallons, valued at \$3,415,936 in 1900, an increase in favor of 1901 of 1,701,272 gallons.

The following are the official quotations on cottonseed and cottonseed products as posted at the Cotton Exchange in New Orleans on the 6th inst.: Prime refined oil in barrels, 39 cents per gallon; off refined oil in barrels, 38 cents per gallon; prime crude oil, loose, 34 cents per gallon; off do., nominal per gallon; prime cottonseed cake, \$28.75 per ton of 2240 pounds; off do., nominal; prime cottonseed meal, \$28.50 per ton of 2240 pounds; off do., nominal; soap stock, loose, 1.10 cents per pound; linters, per pound, choice, nominal; A, 3¼ cents; B, 2¾ cents; C, 2¼ cents; cottonseed in sacks delivered in

OIL.

full and practical invited his industry.

Mill, just commenced. The market is encouraging. Railroad, a day.

of Galveston. Reports for De-

made on exporters. Oil price, loose, 26¢ per barrel, 3 cents.

year the plant is and day, about the tons.

also own. C. N. of manufactur-

products last year the busi- of cot- at port valued pounds, 1900, a 447,505 oil for gallons, 407,750 900, an 701,272

otations ducts as in New refined off reg- gallon; gallon; cotton- pounds; meal, off do. nts per, nomi- C, 2% erer in

New Orleans, \$15 per ton of 2000 pounds; in bulk delivered in New Orleans, \$14 per ton of 2000 pounds.

Mr. Robert P. Skinner, American consul at Marseilles, makes an interesting report to the State Department at Washington, D. C., relative to the shipment of cottonseed oil from that port. Southern exporters will be interested to know this oil may possibly be the American oil shipped to American markets. The consul says: "I have taken the pains to procure a sample of the last consignment of cotton oil thus forwarded to the United States, and, after submitting it to local experts, find that there is a difference of opinion with respect thereto. One experienced manufacturer gives it as his opinion that it is nothing more nor less than American oil, or, at the most, a compound, while other experts, notably two of very high reputation, pronounced it a pure cotton oil crushed from Indian or Egyptian seeds. These experts are very definite on the point that this article is not of American origin and is not mixed with olive, sesame or other vegetable oils. Such tremendous strides have been made by the American oil manufacturers that their brands are known in this market not only among large buyers, but by small grocers, and even actual consumers. During the past year large quantities of American oil sold to Marseilles soap manufacturers have been resold upon arrival either for direct consumption or for further refining, the soap manufacturers having found it possible to replace this oil with cheaper vegetable oils of local manufacture. Thus the steady advance of the American cotton-oil industry threatens the soap industry with a new danger in the loss of a raw material once cheap, but now too valuable for their purposes."

The New Orleans Board of Trade, Mr. H. H. Smith, secretary, is circulating a copy of the following extract from the Constitution of the State of Louisiana exempting certain manufacturing industries from taxation for ten years: "There shall also be exempt from parochial and municipal taxation for a period of ten years from the first day of January, 1900, the capital, machinery and other property employed in mining operations, and in the manufacture of textile fabrics, yarns, rope, cordage, leather, shoes, harness, saddlery, hats, clothing, flour, machinery, articles of tin, copper and sheet iron, agricultural implements, and furniture and other articles of wood, marble or stone; soap, stationery, ink and paper, boat-building and fertilizers and chemicals; provided, that not less than five hands are employed in any one factory; provided, that nothing herein contained shall affect the exemptions provided for by existing constitutional provisions."

Arrangements have been practically completed for the consolidation of the Cotton Ginners' Journal of Waco, Texas, with the Weekly Tribune of that city, which will change the Journal from a monthly to a weekly. The Tribune, a well-established and widely-read Texas newspaper, is the property of Mr. A. R. McCollum, the founder and manager of the Cotton Ginners' Journal, and the consolidated publication will be managed by him, with no change in the distinctive policy of the Journal.

The Patterson Transfer Co. has contracted to haul and store about 9000 tons of wire and nails which the American Steel & Wire Co. is shipping from Pittsburgh to Memphis for distribution in the South. It is estimated that there will be in all 140,000 packages, and the shipment is made by seven barges.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record, Baltimore, Md., January 8.

The week under review has developed very little expansion in the volume of trade in the various channels of the local lumber market. The various companies engaged in the industry have been making arrangements for the business of the new year, and stocktaking and repairs to mills have been in order. The business of the week has, therefore, been confined to light transactions generally, and dealers are not buying in large lots. The demand for lumber, however, is steady, and in all commercial woods the situation is regarded as very promising for the new year. The North Carolina pine trade is in good shape, and manufacturers have all they can do to supply the demand. A number of companies engaged in the North Carolina pine business are considering the plan of enlarging their plants and preparing for an increase in trade. Prices hold firm, with a hardening tendency. White pine is reported active, and prices strong, with the demand fair. In hardwoods there is a tendency towards higher prices for dry stock, both in oak and ash. Poplar is still in active demand, with values firm and stocks not excessive.

Norfolk.

[From our own Correspondent.] Norfolk, Va., January 6.

The new year has opened with a fair volume of business in every branch of the lumber industry of this section. It is yet too early, however, to report a general activity in certain lines, as the closing up of the old year's business will restrict operations somewhat for a few days. The outlook is regarded as favorable for a substantial business during the present year, and in North Carolina pine manufacturers are well satisfied with general conditions. The demand from New York, Philadelphia, Boston and the Middle States generally has been quite pronounced during the last half of the old year, and at present stocks at all milling sections are very light, while there has been only a slight accumulation at any time in the past year. At present some very large shipments are delayed on account of scarcity of cars, and manufacturers have in some cases more orders on their books than they can fill. Dressed lumber is in very good shape, and planing mills are working at their full capacity to supply the demand. Prices throughout the general list continue firm, with a hardening tendency, and should very severe weather prevail during the next sixty days lumber is likely to become scarce, and under a pressing demand prices are bound to advance. In hardwoods a considerable volume of business is reported, and there is a firmer feeling in the market for all commercial woods. Shipments by water have been moderate, and the offering of desirable tonnage is not excessive, while rates are well maintained. Late charters have been closed for vessels at \$2.50 to \$2.65 to New York and \$3.50 to \$4 to Boston and eastward.

Savannah.

[From our own Correspondent.] Savannah, Ga., January 6.

The new year opens with a fairly active lumber market in Southern Georgia and the general conditions surrounding the industry favorable for a good trade during the winter and spring months. At mill-

ing sections, as usual during the holidays, business has been in many cases suspended, millmen enjoying the festive season and the various companies attending to repairs of plants and getting in good shape for successful operation. The demand for lumber from the usual sources is setting in already, and as shipping facilities are now more favorable, considerable lumber is likely to go out in the next sixty or ninety days. All advices from points of consumption are very favorable, and the business of the present year is likely to be of a substantial character. At nearby ports in Georgia the feeling among lumbermen is of a similar nature. At Brunswick the year closed with shipments larger than ever before in the history of that port. Shipments for eleven months ending November 30, 1901, were 124,200,000 superficial feet of sawn timber and lumber, 140,270 cubic feet of hewn timber, besides crossies valued at \$13,691, shingles at \$5348, and logs, laths, piling, etc., valued at \$31,772. The year at Brunswick opens under very favorable conditions, the demand being brisk and prices firm and a shade higher on certain grades. Rates reported during the week for charters were \$5.25 for lumber Darien to New York; Brunswick to St. John, N. B., with lumber at \$7.50; Brunswick to Baltimore with crossies at 14 cents, and \$5 to New York for lumber.

Mobile.

[From our own Correspondent.] Mobile, Ala., January 6.

During the past week lumbermen, as usual at this period of the season, have been engaged in closing up the books for last year and preparing for the trade of the new year. Conditions at present in all avenues of the timber trade are considered very favorable, and prices are now considered firm at 15 cents per cubic foot. At a meeting of the Gulf Coast Lumbermen and the Sawn Timber Manufacturers' Association, held here on the 1st inst., the members present were unanimous in their determination to curtail the output and maintain prices. The only business transacted was that the association agreed to give the Shippers' Association of Pensacola, Fla., 100,000 pieces from the Pensacola mills and 50,000 pieces from the Mobile mills at 15 cents. The Shippers' Association agreed to take this quantity up to May 1, providing it get the preference on the remainder of the cut at a price to be agreed upon. The lumber trade is in fair shape, the interior demand generally absorbing the output. Mills in this section are all busy, and manufacturers are generally firm holders, and not disposed to sell below list figures. The shipments of lumber last week amounted to 2,797,952 feet, and for the season 29,245,254 feet, against 31,776,787 feet in 1900-1901. The demand at the moment for lumber is mostly from Cuba and South America. The shipments of sawn timber last week aggregated 164,452 cubic feet, and of hewn timber 19,881 cubic feet. Timber freights continue steady, last business being at 85¢, January, for timber from the Gulf to the Continent. Lumber rates are \$5.75 and free wharfage Mobile to Havana, and \$6.50 for dry cypress from the Gulf to New York.

Jacksonville.

[From our own Correspondent.] Jacksonville, Fla., January 6.

The progress in the commerce and industry of Florida during the past year has been like that of other States in the South—of increased volume as compared with previous years. The collector of customs, in his annual report of business at the port of Jacksonville, makes a showing which, like all other ports of Florida

on the east and west coast, shows a most pronounced development during 1901. The lumber industry of Jacksonville alone has been remarkably successful during the past year. With unbounded timber resources to draw from, the output of mills has been carefully watched in order to meet the general demand for lumber, and at the same time allow but a slight accumulation of stock. Under a brisk inquiry from Northern and Eastern centers prices have been well maintained, and at the moment the list of values for all grades and dimensions is firm and hardening. Both in yellow pine and cypress lumber the situation is all that could be desired, and manufacturers are generally satisfied with prospects of trade for the new year. During the past year the coastwise shipments of wood products from Jacksonville were as follows: Yellow-pine lumber, 113,959,534 feet; cypress lumber, 4,205,267 feet; shingles, 30,277,318; crossies, 544,844, and naval stores, 177,822 packages. The foreign shipments were 10,381,577 feet of lumber and 1,458,800 shingles. Wood-working factories have enjoyed a prosperous year; 16,695 packages of doors, 102,560 orange boxes and 195,892 vegetable and fruit crates were shipped. The Clyde Line service to New York and Boston has had a very prosperous year, carrying out each trip a full complement of lumber and other wood products. The lumber market at the moment may be written active, with values firm and advancing, orders being numerous for prompt and near delivery. The offering of vessels for carrying lumber is good, and arrivals in early January will be liberal. The freight market is very steady, with rates unchanged.

Lumber Notes.

Exports of lumber from the port of Fernandina, Fla., in December, 1901, amounted to 7,762,911 feet, of which 5,784,538 feet were domestic and 1,978,373 feet foreign.

The Hinds Lumber Co. of Big Springs, Howard county, Texas, has been chartered, with a capital stock of \$10,000. The incorporators are J. N. Rushing, W. A. Hinds and C. C. Hinds.

The A. C. Oliver Lumber Co. of Morganton, W. Va., recently incorporated, has received its charter. It is capitalized at \$50,000. Its plant will be located in a timber tract which will be taken out in the Dellslow region.

The shipments of staves from the port of New Orleans for the year 1901 amounted to 25,144,854 pieces, valued at \$2,528,747, against 23,283,799 pieces, valued at \$2,338,577 in 1900, a gain of 1,861,055 pieces in favor of 1901.

Mr. E. E. Price, exporter and dealer in hardwoods, with offices in Manufacturers' Record Building, Baltimore, has issued his calendar for 1902. This calendar is among the most artistic of any yet received, the coloring and other lithographic points being of a high order.

The Farrell Bros. & Walkins Lumber Co. of Little Rock has been incorporated, with a capital stock of \$60,000, all subscribed. The officers and incorporators are: R. E. Farrell, president; Omer Farrell, vice-president; William E. Farrell, secretary and treasurer, and J. A. Walkins.

The shipments of timber and lumber from the port of Wilmington, N. C., for 1901 amounted to 42,095,674 feet, of which 33,316,477 feet were coastwise and 9,379,197 feet foreign, against 35,539,244 feet in 1900, of which 23,503,067 feet were coastwise and 12,036,177 feet were foreign. Shipments of shingles in 1901

aggregated 6,776,890, against 5,204,825 in 1900.

The Snowbird Lumber Co. of Asheville, N. C., has been chartered, with a capital stock of \$150,000. All the incorporators except Duff Merrick are residents of Philadelphia and Elkins, W. Va. Mr. Merrick is designated as the principal agent of the company. The company will operate saw-mills and deal in all kinds of lumber.

The schooner J. S. Hopkins arrived last week at Salisbury, Md., from Florida with 1,200,000 shingles consigned to W. B. Tilghman & Co. During 1901 the sales of Florida shingles by this firm amounted to over 8,000,000, making a gross business of \$50,000. The firm is now arranging for larger consignments during 1902.

The coastwise exports of wood products from the port of Jacksonville for the year 1901, as reported by the collector of customs, were as follows: Yellow-pine lumber, 113,959,534 feet; cypress lumber, 4,205,267 feet; shingles, 30,277,318 feet; cross-ties, 544,844, and naval stores, 177,822 packages. The foreign exports were 10,381,577 feet of lumber and 1,458,800 shingles.

An important change in the shipments of lumber from Petersburg, Va., is about to be made by Col. E. M. Field and associates. These parties have purchased a large planer and saw, and the lumber in future will be dressed before it is shipped. By this method larger cargoes can be shipped than in the rough, while it can be dressed much cheaper than it can at Northern points.

The Builders' Supply Co. of Mobile, Ala., commenced operations last week in its improved plant in that city. The company has erected a new mill building and added a planing mill to its equipment and introduced various machinery appliances to increase its output. The company makes a specialty of sash, doors, blinds, moldings, cypress shingles and dressed and rough lumber, etc.

The shipments of lumber from the port of Mobile, Ala., last week aggregated 2,797,952 feet, and for the season 29,240,254 feet, against 31,776,787 feet in 1900-1901. Shipments of timber for the week amounted to 164,452 cubic feet of sawn and 19,884 cubic feet of hewn. Other woods shipped were 10,620 cubic feet of oak, 10,049 cubic feet of poplar, 30,819 cross-ties and 277,217 staves.

The Reynolds Manufacturing Co. of Norfolk, Va., has been chartered, with a capital stock of from \$5000 to \$10,000. The company proposes to manufacture lumber in Virginia and North Carolina. The officers of the company are: J. M. Reynolds, president; Richard McIlwaine, vice-president; B. B. Reynolds, secretary and treasurer. These, with Messrs. J. M. Allen and W. R. Robbins, constitute the board of directors.

The Norwegian ship Regina, 554 tons, was loading last week at Pensacola a cargo of staves for Certe, France. This will be the first solid cargo of staves shipped from Pensacola in some years, although partial shipments are sent out on almost every steamship. The Regina's cargo will consist of 135,000 pieces, shipped by J. M. Rosengrant of Savannah. Similar shipments by the same party will be made in future.

The Gulf Red Cedar Co., whose mill is located at Cedar Plains, near Falkville, Ala., will soon be put in operation. The machinery has arrived, and will be placed in position at once. Cedar blocks for making pencils will be cut and shipped from Falkville to Europe, where they will be prepared and polished and re-

turned to New York, where the graphite will be placed in them. The industry represents an outlay of about \$25,000, and will employ quite a number of skilled laborers.

The Standard Arm & Pin Co., manufacturer of crossarms, brackets and pins for telegraph and telephone poles, is putting in a plant at Laurel, Miss., which will be in operation by the 15th inst. This company operates plants at Gadsden, Ala., and in the Blue Ridge mountains of Georgia, and its product is marketed all over the West and Northwest and Canada, as well as throughout the South. The building for the plant is now under construction. The daily capacity of the plant will be one carload of crossarms, brackets and pins.

C. H. Bradley & Co., lumber inspectors and shippers, of Duluth, Minn., have prepared their annual statement of lumber production, etc. The statement relates only to the saw-mills and yards on the Duluth-Superior harbor, and covers the year ending December 1, 1901. The total cut for that period was 423,511,000 feet; total stocks on hand December 1, 1901, amounted to 142,062,000 feet, and the total of unsold stocks at that date was 51,503,000 feet. The lumber shipments from the head of the lakes for the year amounted to 449,747,000 feet.

The Saw-Mills Association and the Gulf Coast Timber Association met at Mobile, Ala., on the 1st in joint session for the purpose of taking some action looking to the curtailment of the manufacture of sawn timber and the maintenance of the price at fifteen cents. After a full discussion of the matter in conference a committee was appointed to consider a plan of action and report at the next meeting, to be held in February. After the conference the Sawn Timber Association met and agreed to sell to the Shippers' Association of Pensacola 100,000 pieces of sawn timber from Pensacola and 50,000 pieces from Mobile at fifteen cents. The Shippers' Association agreed to take this amount up by May 1 if it is given the preference after that time at a price to be agreed upon.

The biggest deal in the history of the lumber business was consummated last week at Beaumont, Texas, when the Kirby Lumber Co., with a capital of \$10,000,000, accepted the following lumber plants: The Reliance Lumber Co., the Texas Tram & Lumber Co., including the Village Mills Co., the Beaumont Lumber Co. and the Adams Mill at Call. The deposits of two of the Beaumont banks were thus increased about \$3,500,000, and on the 2d inst. the newly-received funds were transferred to the credit of the various concerns purchased by the Kirby Lumber Co. The purchase of the Bancroft Lumber Co. by the Kirby Company will not be closed for about thirty days, and there are other plants contracted for by the Kirby Company which, it is said, will make the total expenditure for saw-mills about \$5,000,000. The officers of the company as announced are as follows: John Henry Kirby, president and general manager; Emmett A. Fletcher, manager of mills; M. J. Godfrey, general storekeeper; Frank M. Aldridge, manager of logging; Samuel A. McNeely, manager of tie department; George R. Wansborough, traffic manager; Samuel T. Swinford, general sales agent; W. W. Wilson, general purchasing agent; W. Y. Fuqua, general auditor, and Fred A. Helbig, treasurer. Other appointments will be made in a few days.

A test of the new floating dry-dock at New Orleans with the collier Sterling was a success. There was not a hitch or a jar during the whole test.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., January 8.

The tone throughout the local phosphate market continues steady for all lots suitable for the fertilizer trade in this section. The demand, however, from fertilizer men is not urgent, but later on considerable business is expected. From the various mining sections in the South reports are all favorable for a considerable output during the present year. Shipments from the Florida ports have been falling off during the holidays, but a large increase is expected in January and February, considerable tonnage having been chartered for those months. The situation in Florida among miners is at the moment much improved, and a vigorous campaign is looked for during the winter and spring months, as some new plants will be in operation and new deposits opened. Prices are now more satisfactory, and the demand from foreign sources more decided for high-grade rock, which, by the way, is at the moment far short of the stock on hand last year. South Carolina rock is improving in shipments, both foreign and domestic, and the market is steady for both crude and hot-air-dried rock. In Tennessee the situation at the opening of the new year is much more favorable than at the same date last year. Stocks above ground have been well cleared up, and with favorable weather mining will be pursued with the usual vigor. Prices for both domestic and foreign rock are good.

Fertilizer Ingredients.

The local market for ammoniates is fairly active, with considerable inquiry from the South. There is also a fair Eastern inquiry, but the volume of business is, as usual, moderate for this period of the season. Both dried blood and tankage is firm, the latter slightly higher. Sulphate of ammonia is steady, and in fair demand. Nitrate of soda is very steady. Messrs. Thos. H. White & Co., in their review of the market for the month of December, say: "There has been a fair Southern demand for ammoniates during December, and prices have been fairly steady. Concessions at times were made on both blood and tankage, but the offerings were freely taken and the tone of market recovered. Some large deals of crushed tankage for January-February delivery have been made at \$2.27½ and 10 c. i. f. basis Savannah or Charleston."

The following table represents the prices current at this date:

Sulphate of ammonia (gas).....	\$2 77½¢ 2 80
Nitrate of soda, spot Balto.....	1 90 64 1 92½
Blood.....	2 27½¢ 2 30
Azotine (beef).....	2 30 64
Azotine (pork).....	2 30 64
Tankage (concentrated).....	2 17½¢ 2 20
Tankage (9 and 20).....	2 25 & 10¢ 2 30 & 10
Tankage (7 and 30).....	21 00 64 22 00
Fish (dry).....	25 00 64 27 00

Phosphate and Fertilizer Notes.

The schooner L. Mulford cleared from Charleston, S. C., last week with 791 tons of phosphate rock for Barren Island.

The total shipments of phosphate rock from Port Tampa, Fla., for the year 1901 amounted to 347,015 tons, valued at \$2,282,000.

The total shipments of Tennessee phosphate rock from the port of Pensacola for December, 1901, aggregated 8508 tons to European ports.

The Consolidated Phosphate Co. at Fort Ogden, De Soto county, Florida, is now in full operation, employing a large number of hands.

It is stated that the Adams Machine Co. is making preparations to mine boul-

der phosphate near Morriston, in Levy county, Florida. This company expects to erect a phosphate plant at its mines in the near future.

The fertilizer department of the Mississippi Cotton Oil Co. at Meridian, Miss., together with a car loaded with fertilizers, was destroyed by fire on the 2d inst. The total loss is estimated at \$50,000, fully covered by insurance.

The steamer Northeastern, which arrived at Baltimore on the 4th inst. from Punta Gorda with 3000 tons of phosphate rock, went aground while attempting to reach the Grafflin Fertilizer Co.'s pier at Canton. She was still hard and fast on the 6th inst.

Messrs. J. M. Lang & Co. of Savannah, Ga., report the shipments of high-grade Florida phosphate rock from that port for the month of December, 1901, at 11,031 tons; amount previously reported 152,408 tons, making the total shipments for the twelve months of 1901, 163,439 tons.

The shipments of Tennessee phosphate rock from the port of Pensacola for the week ending December 29 amounted to 3114 tons. Last week the Gulf Transit Co. cleared the steamship Ida for Genoa with 2398 tons of phosphate rock and the steamship Neptune with 835 tons for Bremen among their cargoes.

Shipments of phosphate rock from the port of Punta Gorda for December amounted to 10,928 tons, all coastwise; previously reported during the year, 17,095 tons coastwise and 18,790 tons foreign, making a grand total for the year 1901 of 46,813 tons, of which 28,023 tons were domestic and 18,790 tons foreign.

The Davison Chemical Co. of Baltimore county, Maryland, has been incorporated, with a capital stock of \$500,000. The incorporators are Calvin T. Davison, Geo. W. Davison, Edward W. Davison and John H. Wight. The company is organized for the purpose of engaging in the manufacture and sale of chemicals. The principal office will be in Baltimore.

Official announcement has been made by the Louisville & Nashville Railroad of the movement of phosphate rock from the Mt. Pleasant district in Tennessee for the eleven months ending December 1, 1901, as follows: Total shipments for export, 115,337 gross tons; total shipments for domestic ports, 202,916 gross tons, making a total of 318,253 gross tons shipped from the district.

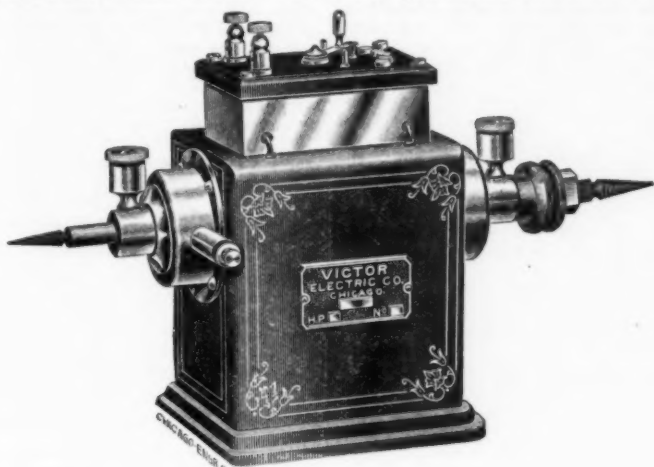
Stockholders of Swift & Co., packers, of Chicago, have voted to increase the capital stock from \$20,000,000 to \$25,000,000, the proceeds of the new stock to be devoted to extensions of the business. The annual report of the company gives the total distributive sales for the year at \$200,000,000, compared with \$170,000,000 last year. The company reports total assets of \$42,604,332, compared with \$36,720,000 in 1900. The surplus now amounts to \$3,746,005, compared with \$2,446,606 in 1900.

A rumor was current at Mt. Pleasant, Tenn., last week that Mr. J. D. Stewart and associates, organizers of the Federal Chemical Co. of Louisville, Ky., had purchased from Messrs. Ruhm Bros. a 51 per cent. interest in what is known as the "Southport Field." This property, it is stated, will be conveyed to a new corporation having a capital stock of \$200,000, of which the Federal Chemical Co. will take 51 per cent. and Ruhm Bros. 49 per cent. The tract sold contains 940 acres of land, having, it is said, shown over 500,000 tons of high-grade phosphate rock. The entire village of Southport, in Maury county, is embraced in the property.

MECHANICAL.**Victor Motor Lathe.**

A very valuable addition to the equipment of the dental practitioner and for purposes where a small amount of me-

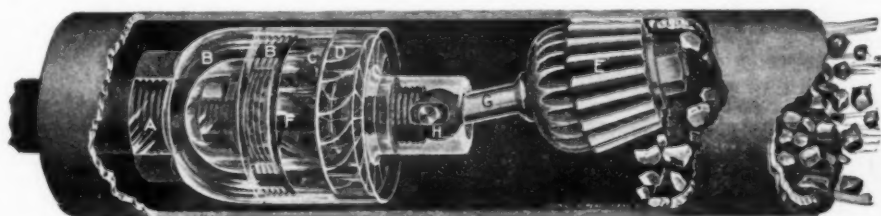
any pressure from 60 to 150 pounds, but from 100 to 120 pounds has been found to be the proper pressure to use for ordinary scale. Boilers with scale one-quarter inch thick on the back end of 18-foot tubes have been cleaned at the rate of five minutes' application to each tube. If neces-



THE VICTOR MOTOR LATHE.

chanical power is required is the electric motor lathe manufactured by the Victor Electric Co., 55-61 Market street, Chicago, illustrated herewith. The Victor lathe is an ironclad dustproof motor, so constructed that the buffs and grinding wheels can be attached directly to the

sity demanded, a number of cleaners could be used at one time, thereby reducing the time of boiler cleaning materially. Two cleaners in use at once would reduce the time of cleaning one-half, and using a larger number of cleaners would make a corresponding reduction in time necessary



THE ATLAS TUBE CLEANER.

armature shaft. The speed of the machine is perfectly controlled by means of a seven-speed switch, shown on top of the motor; the mandrels run absolutely true, and the armature being perfectly balanced, there is no noise in operation.

The cost of operating this machine is from seventy-five cents to a dollar and a-half per month. Its advantages are obvious. There is no belt slippage or belt trouble of any kind. Its own weight is sufficient to hold it in place, so that it is not necessary to fasten it down; hence it can be shifted around at will to suit the convenience of the operator. The wearing parts are very durable, so that after the two-year guarantee is up the cost of repairs will not average over \$1.50 per year.

Atlas Tube Cleaner.

The Atlas tube cleaner is a perfect motor designed to run either by water or steam. The source of power is a miniature water-wheel of the best design of the impact and turbine type D, connected to which is the power shaft F; at the end of the shaft is a toggle joint H, connecting the cuttershaft G, on the end of which is the cutter E, which removes the scale. The water enters at A into the chamber BB, and through the port holes or nozzles C, striking the buckets of the impact and turbine wheel D, causing it to revolve at the rate of 4000 revolutions per minute under a pressure of 100 pounds, and causes the cutter E, through the toggle joint H, to revolve in a gyrating and roweling motion. The rapidity of the impact disintegrates and dislodges the scale, and is washed through the tube by the water passing through from the water-wheel D.

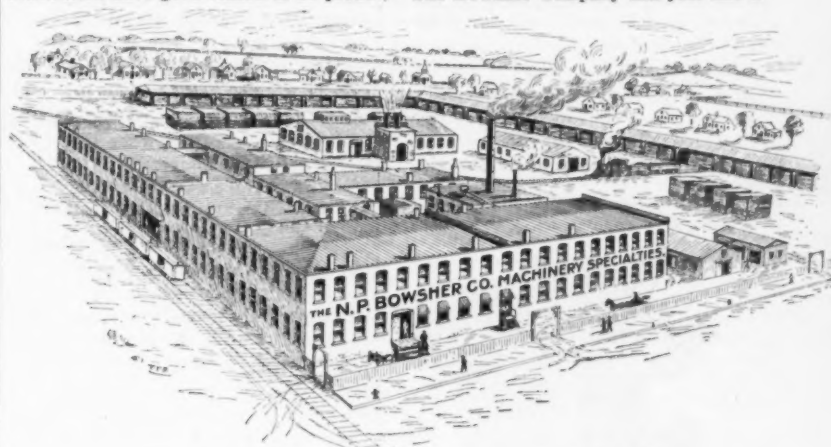
The tube cleaner is designed to work at

by six circular nozzles one-eighth inch in diameter, the combined area of which is very small. The best material is used in its manufacture, and the construction represents the highest class of workmanship. The machine is built very strong, and the

bearings are ball-bearing of the latest improved type; in short, the material and workmanship are the very best. It is manufactured by the Atlas Pipe Wrench Co., 121 Liberty street, New York.

Where the Bowsher Feed Mills Are Made.

The owners of the plant shown in this illustration have good reason to be proud



PLANT OF THE N. P. BOWSHER CO., SOUTH BEND, IND.

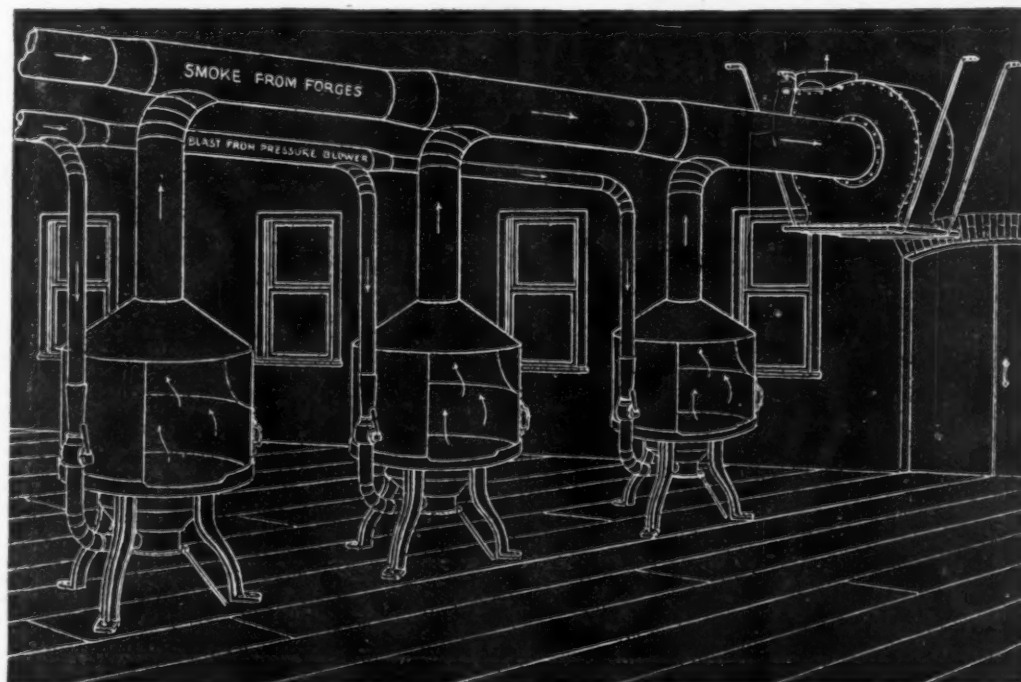
of it, not because it is of mammoth proportions, but because its growth is an index of the merit of the machines they put out. It is thoroughly adapted to the needs of their business, and equipped with

manufacturer claims exceptionally light-running qualities, while the mills are fitted with numerous labor-saving devices and attachments that are of great practical value to the user. One feature of the Bowsher mills of special interest to the Southern trade is the fact that the mills will grind corn with the shuck, also handle cottonseed, alone, or mixed with grain. The Bowsher Company has just had a

new side-track completed to its warehouse, and has replaced the old electric-lighting plant with a new one of enlarged capacity. Such are some of the many improvements to increase facilities for production. A handsome booklet describing the Bowsher mills may be had by addressing the N. P. Bowsher Company, South Bend, Ind.

The Sterling Forge Systems.

Herewith is shown a cut of the Sterling blower systems as applied to blacksmith forges for blowing same and exhausting the fumes, thereby keeping the air in shops free from smoke, gases, etc. The Sterling Blower & Pipe Manufacturing Co. of Hartford, Conn., has made a special study of this work, and has designed special attachments to suit the requirements of the work done, the style of forges used and the volumes of heat and smoke, which are very important items, and can



THE STERLING BLOWER SYSTEMS AS APPLIED TO BLACKSMITH FORGES.

twenty-five horse-power. They are suited for crushing and grinding ear corn, and grind all kinds of small grain. The reduction in the Bowsher mills is made on conical-shaped grinders, something different from those used in any other mill. The

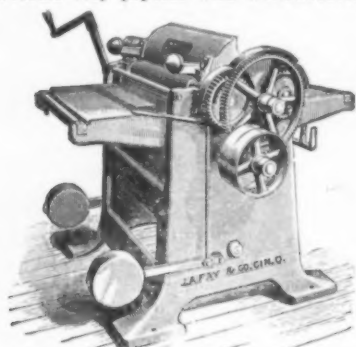
only be determined by long and extended experience. These systems are in use in a number of blacksmith shops, and a recent large order received was for the equipment of the Townsend & Downey Shipbuilding & Repair Co. blacksmith

shops at Shooter's Island, N. Y. As a matter of fact the above plant is equipped from end to end with the Sterling systems for handling shavings, sawdust, smoke, etc.

The Sterling Blower & Pipe Manufacturing Co. has established at Greensboro, N. C., a Southern office, in order to give its Southern customers the best of attention. Any parties who are in the market for anything in the line of its manufacture can address the company at Hartford, and it will be pleased to have a representative call and design systems free of charge, guaranteeing satisfactory results.

Improved Medium Surfacers.

The surfacer herewith illustrated has become very popular with woodworkers,



No. 2 SURFACE PLANER.

owing to its many commendable features. The planer is especially designed for general work in nearly every line of wood-working plants that do planing, and it will with very little power surface in a superior way on all kinds of soft or hard

work. The bed is hung between gibs in the frame, thus accurately taking up all wear. The cutterhead and feed rolls hang in the frame, preserving the same relative position with bedplate, which is a great improvement over old methods of making independent adjustments. The feeding rolls are large, strongly geared, and the first pair heavily weighted. The long bed has friction rolls, and all parts are thoroughly braced, planed and bolted.

The maker, J. A. Fay & Egan Co. of No. 270 to No. 290 West Front street, Cincinnati, Ohio, will furnish any additional information on request, together with terms and cuts showing it in detail and to better advantage.

New Six-Inch Outside Molder.

These cuts show a strictly up-to-date twentieth-century outside molder. It has the merits of being convenient to set up and adjust, is strongly driven, has a powerful feed, and the shafts and arbors are large, thus preventing liability of springing or otherwise getting out of true. The framing is heavy and solid, and of such design as to allow as convenient access to the inside vertical head as to any other head or portion of the machine.

The top-head arbor has an outside bearing, which is easily removed. This bearing is not only firmly bolted to the frame, but extends to the floor, consequently increasing the floor space of the machine and adding to its steadiness. The feed consists of three feed rolls, and there are two rates of feed. The manufacturer claims that no machine obtainable excels this one for capacity or convenience, and it is sent out under a strong guarantee for good performance. Inquirers may address

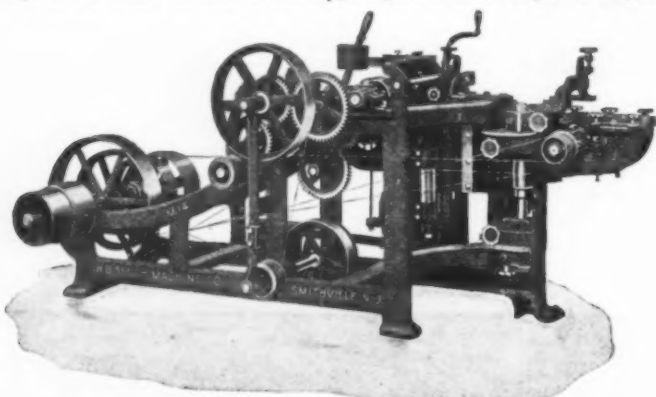


FIG. 1—NEW SIX-INCH OUTSIDE MOLDER.

woods. It is made in three sizes, to plane sixteen, twenty and twenty-four inches wide, and from one-sixteenth to six inches thick. Pressure bars are fitted on each side of the cylinder for planing thin and short stuff, and also for producing a fine surface on the material. The frame is

the H. B. Smith Machine Co., Smithville, N. J.

Considerable opposition has developed in Virginia against the proposition before the constitutional convention of that State to create a corporation commission. Pro-

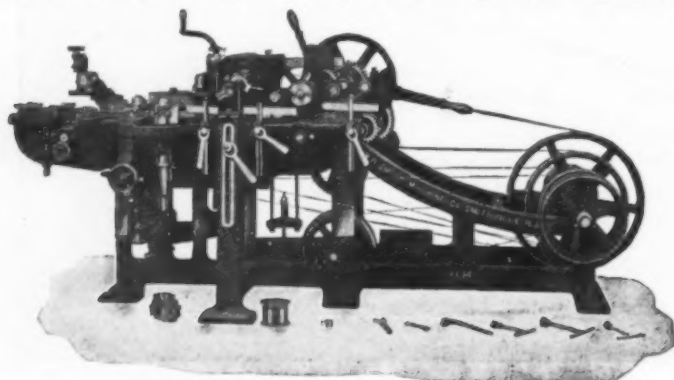


FIG. 2—NEW SIX INCH OUTSIDE MOLDER.

solid, insuring great strength and solidity, and the crucible-steel cylinder has lips to break the chip. The bed is raised and lowered by crank and rod convenient to operator, and is connected by gears to raising screws for different thicknesses of

tests have been heard from manufacturing corporations and other sources on the ground that it will prevent capital from coming to Virginia, and to the committee of the convention having the subject specially in charge one speaker said that he

would rather have the existing constitution, negro suffrage and all, than a new one with a provision for a corporation commission.

TRADE NOTES.

To Lumbermen.—In another column will be found reference to a tract of 25,000 acres of long-leaf pine timber located near a railroad. John T. Hammond of Nettle, Fla., may be addressed.

Mechanism for Charleston.—The Royal Bag Manufacturing Co. of Charleston, S. C., has recently installed an electric plant. The General Electric Co. furnished the generator and the Ball Engine Co. of Erie, Pa., the engine.

Adding to Its Business.—The Maryland Lime & Cement Co. of Baltimore has decided to add pressed brick in all colors and vitrified paving brick to the stock it carries, and will be glad to quote prices to anyone interested.

In Its New Home.—The new plant of the A. T. Atherton Machine Co., recently described in these columns, has been completed, and the company announces that it is located in its new quarters. The general offices of the company are at the works, which are situated on Prairie avenue, Pawtucket, R. I.

Branching Out in the South.—The Southern business of the American Electric Fuse Co. has expanded to such an extent that it has opened an office and warehouses in the Empire Building, Atlanta, Ga., which will be under the management of Price E. Allison. The business of this company has actually trebled within the last year.

An Interesting Announcement.—The Rogers Screw Co. of Providence, R. I., announces that it is now prepared to furnish all sizes of wood screws in both flat and round heads, and in steel, brass and bronze, with the different finishes required. It has equipped its plant with machinery of the latest construction especially for this purpose.

Industrial Opportunities.—By addressing the Richmond Industrial Development Co. of Richmond, Va., manufacturers will learn of an excellent opportunity to secure space for machinery with ample heat and power. The company in question has erected a building especially for this purpose. Further details will be found in the advertising columns.

A Large Contract.—The school board of Baltimore has given a contract for thirty single keyboard typewriters, which will be used in various schools. The Remington Standard typewriter has been chosen after examining several makes, and the contract is a high testimonial to the merits of this machine. Messrs. Wyckoff, Seamans & Benedict are to be congratulated upon their success.

Consolidated Interests.—The announcement is made that the Yawger-Lexow Company has been formed to represent the consolidated interests of the firms in which Theodor Lexow and I. C. Yawger are interested. The new company will continue to make a specialty of importing and dealing in carbon and borts, and diamonds for mechanical purposes. It will be located at 12-16 John street, New York.

Bright Outlook for 1902.—Judging from recent orders secured by Mr. F. M. Hicks of the Hicks Locomotive and Car Works of Chicago, the outlook for the present year for this concern is exceedingly bright. The orders include two locomotives for the Vera Cruz Pacific Railway of Mexico, three switch engines for the Lake Superior & Ishpeming Railroad, and several passenger and combination coaches for the Quebec Southern Railroad.

Increasing Its Capacity.—The American Bridge Co. has purchased the properties heretofore owned by the Detroit Bridge & Iron Co. of Detroit, Mich., and the same will hereafter be known as the Detroit plant of the American Bridge Co. Mr. Max J. L. Fowler has been appointed manager. The plant thus becomes a part of the Western division of the American Bridge Co., under the jurisdiction of Mr. August Ziesing, Western manager, in Chicago.

An Important Project.—The Maltby-Hornaday Company of Cincinnati, Ohio, has recently been successful in promoting mining interests at Pine Hill, Ky., and the Rock Castle Mining & Development Co. has been formed, with \$300,000 capital stock, for the purpose of carrying out the enterprise.

The property includes 2000 acres of coal land on the line of the Louisville & Nashville Railroad. Bonds will be issued to finance the project, and the Maltby-Hornaday Company will be pleased to answer any inquiries in regard to the new corporation.

An Important Industry.—The organization of the Meldrum Camphor & Chemical Co., which is detailed elsewhere in this issue, means the addition of a very important industry to the list of Southern manufacturing plants. The financial plan has been prepared after careful calculations, and the securities offered the public would seem to be very desirable from an investment standpoint. The personnel of the company includes Mr. Edmund Wilcox, auditor, who is a chartered accountant both in England and this country. Mr. Wilcox has offices in London and New York, also in Boston at 42 Court street.

Advertises Itself.—The flour-mill apparatus manufactured by the Nordyke & Marnon Company of Indianapolis, Ind., has the merit of advertising itself on account of its superior quality. Instances of its performance are continually being made public by letters from patrons, who have found it to be entirely satisfactory. The head miller of the Voight Milling Co. of Grand Rapids, Mich., states that the square sifters installed in this plant are always reliable, no matter what are the weather conditions. Incidentally it may be said that the Nordyke & Marnon Company has considerably enlarged its plant and installed machinery in order to meet the increasing demand in its orders. Thomas M. Van Horn has been added to the staff of traveling salesmen for the company.

Important Combination.—The organization of the Chicago Pneumatic Tool Co. has been completed, and it has taken over the business and plants of the Chicago Pneumatic Tool Co. of Illinois, the Boyer Machine Co., Detroit, Mich.; the Chisholm & Moore Crane Co. of Cleveland, the Franklin Air Compressor Co. of Franklin, Pa., and the New Talle-Howard Pneumatic Tool Co., Limited, of London. The company starts with a working capital very largely in excess of \$1,000,000, of which more than 50 per cent. is in actual cash. The actual earnings of the constituent companies before this organization were at the rate of \$700,000 per year, which, after paying fixed charges and sinking fund under the mortgage, leaves 11 per cent. earnings on the stock. Mr. Duntley, the president of the company, is of the opinion that these earnings will be very largely increased as the result of the unification of these properties, and that one of the great needs is accomplished—getting sufficient capacity to supply the trade and take advantage of the large and increased business which is constantly offering. The executive committee is as follows: J. W. Duntley, chairman; Charles M. Schwab, Max Pam. The officers are: J. W. Duntley, president; W. O. Duntley, vice-president; Edward Y. Moore, second vice-president; Earnest P. Wenger, treasurer; Leroy Beardsley, secretary; S. G. Allen, assistant secretary; Joseph Boyer, mechanical engineer; A. J. Doughty, general superintendent; Pam, Calhoun & Glennon, general counsel.

Birmingham Engine-Builders.—Financially strong, extensive in its operations and directed by shrewd business men is the Hardie-Tynes Foundry & Machine Co. of Birmingham, Ala., manufacturer of Corliss and side-valve engines, hoisting engines, air compressors, mining, mill machinery, etc. This concern is now occupying its new works, which are complete in every detail. The plant occupies a lot 500x400 feet. The pattern shop is 75x100, three stories; the machine shop, 100x200, is a model, and is equipped with an electric traveling crane for handling parts of machines of any size and weight. The foundry is 100x200, and there are two cupolas, the melting capacity fifty tons each per hour. The power-house is 60x50, which is equipped with two Hardie-Tynes Corliss engines, one of 150 horsepower and the other of twenty-five horsepower, the former furnishing the motive power and the latter the power for the electric-light plant. Two lines of tracks run into the works, one that comes directly into the machine shop and the other a material track that delivers raw material to its respective place. Side-tracks connect with the 'Frisco and Central of Georgia Railroad. These works are running night and day, and find it impossible to keep up with its orders. Its trade is not confined to the South, for it has shipped and is shipping East, having recently sent its engines to Jersey City, two Corliss engines to Minneapolis, and has orders from Kansas City, Delaware, Maryland and New York city. It is fully prepared to submit estimates on any kind of work in its line.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with every one interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Birmingham—Coal Company.—Underwood Coal Co. has increased capital from \$50,000 to \$500,000.

Birmingham—Oil Wells, Salt Mines, etc.—Tombigbee Oil, Gas & Salt Co. has been incorporated by G. B. Crow of Birmingham and S. A. Hobson of Woodstock, Ala., with capital stock of \$200,000, to bore for oil, crystal brine, salt, etc., to pipe and convey same, as well as manufacture and prepare the products for market.

Birmingham—Shoe, Harness, etc., Factory. Electric Shoe Co. has incorporated, as recently reported, and will manufacture shoes, harness, trunks, etc.; machinery to be operated by electric power.

Birmingham—Hardware Company.—Morton Hardware Co. has been incorporated, with capital stock of \$5000, by T. S. Morton, president; A. S. Morton, vice-president, and J. B. Morton, secretary and treasurer.

Birmingham—Clothing Factory.—Phillips-Hendon Company has been incorporated, with capital of \$15,000, by Walter C. Phillips, Frank M. Hendon and others, to manufacture clothing and overalls.

Birmingham—Medicine Factory.—Chartered: Rumaticum Company, with capital of \$2500, by Geo. L. Root, Dr. A. B. Daniel and others.

Bluffton—Iron Mining and Manufacturing. Rome Petroleum & Iron Co. intends to develop thoroughly its iron-mines property and build furnaces for iron manufacturing; B. F. A. Saylor, manager, 1334 Unity Building, 79 Dearborn street, Chicago. (See under Rome, Ga.)

Huntsville—Furniture Factory.—R. E. Pettus, president Chamber of Commerce, is in correspondence with parties relative to locating a furniture factory in Huntsville.

Mobile—Mercantile.—Chartered: Weiss-Eichold Liquor Co., with capital stock of \$50,000, by J. W. Weiss, H. A. Horst, E. Eichold, Jr., and others.

Montgomery—Stationery Company.—Chartered: Montgomery Stationery Co., with capital of \$5000, by S. G. Montgomery, S. P. Montgomery and W. F. Frantz of Rogersville, Tenn.

Montgomery—Roundlap-bale Cotton Company.—H. E. Tener, Jr., of New York, Paul

Jones, Texarkana, Texas; A. R. Ninniger and R. G. Banks of Montgomery have incorporated Alabama Roundlap Bale Cotton Co., with capital stock of \$20,000.

Pratt City—Ice Plant.—People's Ice Co. and the City Delivery Co. have consolidated and will operate under the name of the latter company, installing a 100-ton plant.

Sheffield—Electric Plant and Water-works. J. M. Hughes of Beaver Dam, Pa., has been awarded contract for installation of an electric-light plant and construction of water-works system at Sheffield.

Tuscaloosa—Iron-ore Lands, Furnaces, etc. Central Iron & Coal Co. has purchased the ore lands of Martin Mining Co. and Woodstock Ore Co. (about \$20 acres), including all the ore washers and other machinery; has a daily output of 4000 tons, which, in addition to other property, will enable company to operate two or more furnaces, and it is the intention to erect a second furnace.

Woodstock—Furnace.—Central Iron & Coal Co. of Tuscaloosa, Ala., has purchased and will blow in the Edwards furnace at Woodstock.

ARKANSAS.

Little Rock—Lumber Company.—Chartered: Farrell Bros. & Watkins Lumber Co., with capital stock of \$60,000, by R. E. Farrell, president; Omer Farrell, vice-president, and Wm. E. Farrell, secretary and treasurer.

Paragould—Bottling Works.—Crystal Ice Co. will add bottling works to its plant.

Perry—Mercantile.—Chartered: Perry Mercantile Co., with capital stock of \$10,000, by G. W. Colvin and others.

Pine Bluff—Meat Company.—Chartered: I. J. Bloom Meat Co., with capital of \$1500, by I. J. Bloom (president) and others.

Salem—Electric-light Plant.—City will erect an electric-light plant. Address "The Mayor."

FLORIDA.

Arcadia—Publishing.—De Soto Publishing Co., with capital of \$5000, has been incorporated.

Montbrook—Land Company.—Florida Land Co. has been incorporated, with capital of \$40,000, to conduct naval-stores plants, sawmill, etc., by Adam McArthur, N. G. Wade and D. McArthur.

Morrison—Phosphate Lands.—Adams Machine Co. will begin development of boulder phosphate and erect a plant.

Pensacola—Lumber Mills.—Chartered: Modino Lumber & Brick Co., with capital of \$20,000, by Frank Johnson, president; John Baumeister, vice-president; Fred Johnson, secretary.

Plant City—Street Improvements.—City will expend \$2000 in improving its streets. Address "The Mayor."

GEORGIA.

Atlanta—Electric Construction Company.—Southwestern Electric Co. has been incorporated, with capital stock of \$10,000, to conduct general electric construction business, by Wm. S. Connelly, Walter A. Taylor, T. M. Horne and others.

Blackshear—Starch Factory.—Meldrum Camphor & Chemical Co., which was reported at length in our issue of November 28, expects, in addition to the manufacture of its present product, to engage in the manufacture of starch from the cassava plant; C. G. Murray, secretary.

Cedartown—Mercantile.—T. F. Stewart, B. M. Stewart and others have incorporated the Stewart Mercantile Co. to conduct general dry goods business; capital stock is \$7000, with privilege of increasing to \$25,000.

Columbus—Ice Factory, etc.—A. Ilges, J. P. Golden, T. E. Golden and J. P. Ilges have incorporated, with capital stock of \$35,000, the Golden Ice & Coal Co., for the manufacture of ice and ice machines and refrigerating appliances.

Macon—Drug Company.—Henry J. Lamar and J. W. Cabaniss have incorporated the H. J. Lamar Drug Co., with capital stock of \$100,000, and privilege of increasing to \$200,000.

Montezuma—Refrigerating Plant.—Montezuma & Oglethorpe Electric Light & Power Co. will install a two to five-ton refrigerating plant.

Rome—Brick Works.—G. W. Trammell, J. H. Rhodes and W. F. McDuffie (manufacturers of brick) will erect a new \$30,000 plant.

Rome—Oil Wells.—Rome Petroleum & Iron

Co., recently reported organized with \$1,000,000 capital, etc., will soon commence developing its 2100 acres of oil properties. B. F. A. Saylor is general manager; D. H. Craig, secretary, and R. R. Robertson, treasurer; offices at 1334 Unity Building, 79 Dearborn street, Chicago. (See under Bluffton, Ala.)

Tifton—Medicine Factory.—Goodman & Strozer, E. L. Vickers, H. H. Tift and others will form a \$15,000 corporation for the manufacture of patent medicines.

KENTUCKY.

Ashland—Coal and Iron Mines.—Ashland Coal & Iron Railway Co., lately reported as having increased capital, states that such is not the case, but that it has sold to the Ashland Iron & Mining Co. its mining and manufacturing property, and is now engaged only as a carrier, operating twenty-two miles of railroad. The Ashland Iron & Mining Co. is fully equipped with necessary plants for continuing the mining and manufacturing formerly conducted by the railway company.

Hopkinsville—Tobacco Factory.—Hopkinsville Tobacco Manufacturing Co. has reorganized, as lately reported, with paid-up capital of \$25,000, and will increase its capacity to 500,000 pounds per annum. I. F. Campbell is president.

Lexington—Bakery.—Hautier-Cramer Company has been incorporated, with capital of \$15,000, by O. J. Hautier, John G. Cramer and G. W. Barney, and will build an addition to increase capacity; present capacity, 4000 loaves a day.

Louisville—Building Company.—Chartered: Home Building Co., with capital of \$20,000, by William J. Semolin, E. L. Denhard, C. F. Thomas and others.

Louisville—Oil and Gas Company.—Interstate Oil & Gas Co. has increased capital from \$2500 to \$10,000.

Paducah—Kentucky Fluor-Spar Mining & Milling Co., reported lately as incorporated with capital of \$60,000, will manufacture a flux for iron and other ores and metals.*

Pine Hill—Coal Mines, Coke Ovens and Brick Works.—Rock Castle Mining & Development Co. will be incorporated at Trenton, N. J., with capital stock of \$300,000, for developing 2000 acres of coal lands; will install new machinery, and also expects to manufacture coke, fire-brick, etc. Address J. P. Hornaday of the Maltby-Hornaday Company, Union Trust Building, Cincinnati, Ohio.

Winchester—Light Plant and Ice Factory. Winchester Railway, Light & Ice Co., lately reported incorporated with capital of \$100,000, has elected E. S. Jouett, president; M. T. McEldowney, vice-president; J. M. Pickrell, treasurer and general manager, and John E. Garner, secretary. Company has purchased old light plant and street railway operated by horse-power; has commenced erection of brick and stone power-house 135x100 feet, to contain the three proposed new plants, namely, 25-ton ice plant complete, 300-horse-power automatic engine, 100-horse-power engine, alternating incandescent dynamo, 4000-light capacity, and 3000-light capacity alternator for street lighting, 30-kilowatt generator. All machinery contracted for except electric apparatus and cars. James M. Pickrell is general manager.

LOUISIANA.

Iowa—Rice Mill.—Paul W. Daniels of Welsh, La., will erect a rice mill at Iowa.

Jennings—Machine Shop.—Heywood Bros. & Dobbins have purchased the machine shop of Boehm Bros., and will enlarge same, as recently reported.*

New Orleans—Mercantile.—Alexander J. Dwyer and others have incorporated Dwyer Bros., Limited, with capital of \$35,000, to conduct dry goods business.

New Orleans—Grain Elevators.—Illinois Central Railroad Co. contemplates the erection of two large grain elevators at Stuyvesant Docks; J. T. Harahan, second vice-president, Chicago, Ill.

New Orleans—Shipbuilding Plant.—A \$150,000 stock company is organizing to establish plant for the construction of boats, especially newly-designed boats built to haul coal from the Alabama fields. Alex. M. Halliday will be president; R. C. Wilson will be engineer; Thos. J. Woodward, W. G. Wilmot and Walter Verlanders will be interested.

Ronoke—Rice Mill.—C. H. Zwick, W. R. Elber and J. M. Boose will establish a rice mill.

Shreveport—Ice and Cold-storage Plant.—Albert N. Hill has purchased site at \$10,500,

on which he will erect an ice and cold-storage plant.

MARYLAND.

Baltimore—Stamping Works.—Baltimore Stencil & Manufacturing Co., Frank Guldener, president; John R. Karle, vice-president, and Ernest Sharp, secretary, has erected two-story building 80x200 feet on Bush street, in which will be installed machinery for manufacturing galvanized and japanned ware, etc.

Baltimore—Cutlery and Silverware Company.—Chartered: H. M. Justice Company, for manufacturing cutlery and silver-plated ware, with capital of \$5000, by Herbert M. Justice, Jos. M. Smith, John H. Kreh and others.

Baltimore—Mercantile.—Chartered: Chase Store Co., with capital of \$5000, by John A. Sheridan and others.

Baltimore—Gas Machinery.—National Gas Saving Co. has been incorporated, with capital of \$25,000, to manufacture illuminating machinery and appliances, by Christian F. Hershey, Thos. M. Dukehart, Chas. H. Harkins and others.

Baltimore—Quarry and Transfer Company. Isaac H. Peddicord & Sons' Quarry & Transfer Co. has been incorporated, with capital stock of \$40,000, by Isaac H. Peddicord, Everett M. Peddicord and others.

Baltimore—Chemical Company.—Calvin T. Davidson, John Luntz, John H. Wright and others have incorporated the Davidson Chemical Co., with capital stock of \$500,000; office, Fireman's Building.

Baltimore—Storage Sheds.—J. J. Insley of Denton, Md., has contract for erection of the proposed storage sheds at Baltimore of the Armour Fertilizer Co.; structures will be 50x300 feet.

Burkittsville.—Distillery.—Outerbridge Horsey, Thos. S. Lee Horsey, Chas. C. L. Horsey and others have incorporated Outerbridge Horsey Company, with capital of \$40,000; will acquire Horsey distillery and greatly increase capacity of same.

Durant—Mercantile.—Chartered: Mullen & Owen Co., with capital of \$50,000, by W. H. Mullen and others.

Jackson—Machinery Company.—Chartered: Martin & Gaddis, with capital of \$5000, to deal in machinery and machine supplies.

Maryland—Lumber Company.—A. B. Cogswell and others of Warren, Pa., have chartered North Maryland Lumber Co. to conduct lumber and mining business with authorized capital of \$5,000,000.

Salisbury—Cannery.—Roberts Bros. of Baltimore, Md., will erect cannery at Salisbury. There will be two buildings, one 100x40 feet and one 90x30 feet. Capacity will be about 35,000 cans per day.

Stony Creek—Amusement Resort.—The Altoona Hotel Co., recently incorporated, will conduct a summer resort and amusement park at Stony Creek; hotel will be enlarged and improved and new attractions added. For particulars address F. Nollenberger, secretary, Baltimore, Md.

Washington, D. C.—Rifle Manufactory.—Ball-Bearing Rifle Co. has been incorporated, with capital stock of \$500,000, for the manufacture of munitions of war, by Orlan C. Cullen, E. D. Cullen, E. W. Anderson, West Steever and others.

Washington, D. C.—Ice Plant.—E. M. & A. B. Willis will build a 50-ton ice plant; contract awarded.

MISSISSIPPI.

Collins.—Chartered: Holloway & McRaney, with capital of \$50,000, by D. C. McRaney and others.

Dublin—Mercantile.—Chartered: Dublin Mercantile Co., with capital of \$10,000, by J. M. Powers and others.

Greenville—Cotton Company.—Greenville Cotton Co. has been incorporated, with capital of \$20,000, by H. W. Stirling, E. H. Magruder, W. E. Negus and others.

Hazlehurst—Mercantile.—Hubbard & McGrath, with capital of \$50,000, have incorporated. T. J. Hubbard, J. H. and J. W. McGrath are the incorporators.

Laurel—Arm and Pin Factory.—Standard Arm & Pin Co. of Gadsden, Ala., manufacturers of crossarms, pins and brackets for telephone, telegraph and electric-light poles, will establish a branch plant at Laurel with capacity of one carload per day.

Leaf—Land Company.—Leaf Land Co., with capital of \$10,000, has been incorporated by J. H. Thompson, M. J. O'Neill and E. L. Thompson.

Vicksburg—Ice Plant.—Vicksburg Ice Co. will increase capacity of its plant to eighty tons per day.

MISSOURI.

Fulton—Ice and Cold-storage Plant.—State Lunatic Asylum No. 1 will install a \$5000 ice and cold-storage plant. James Leach, chief engineer, can give further particulars.

Joplin—Lead and Zinc Mines.—Conqueror Lead & Zinc Co. has been incorporated, with capital stock of \$150,000, by Wm. Hank, A. D. Shockley and G. W. Hank.

Kansas City—Furnace Company.—President Furnace Co., with capital stock of \$100,000, has been incorporated by John H. Lucas, Mathew A. Foster, Ben. C. Taylor and others.

Kansas City—Mercantile.—Chartered: Fred J. Peifer Furnishing Goods Co., with capital of \$10,000, by Fred J. Peifer and others.

Kansas City.—Chartered: Kansas City Wonderland Co., with capital of \$5000, by Wm. J. Keefe, Louis B. Conell and Geo. W. Van Deman.

Kansas City—Electrical Engineering.—Chartered: Hodge-Walsh Electrical Engineering Co., with capital of \$30,000, by Robert W. Hodge, John E. Walsh and W. H. McKinley.

Kansas City—Ice Plant.—Saloonkeepers' Association and the Butchers and Grocers' Association contemplate organizing an \$85,000 stock company for erecting and operating an ice plant.

Kennett—Planing Mill.—Dillman Planing Mill Co., with capital of \$2000, has been incorporated by M. A. Dillman, L. C. Dillman and A. J. Dillman.

Lebanon—Ice and Cold-storage Plant.—Lebanon Light & Magnetic Water Co. will, it is said, erect a \$35,000 ice and cold-storage plant.

Ozark—Cannery, etc.—Chartered: Fidelity Canning & Manufacturing Co., with capital of \$5000, by S. E. Cope, M. L. Howard and F. R. Pierce.

St. Francis County—Lead Mines.—Southern Mining & Prospecting Co. has been formed at Lewisburg, Tenn., with capital stock of \$350,000, and has options on 5000 acres of land in St. Francis county, where the company will prospect for lead.

St. Joseph—Refrigerating Plant.—Hammond Packing Co. has awarded contract for a 500-ton refrigerating plant with which to equip its new packing-house.

St. Louis—Mining.—Chartered: St. Louis-Ebon Mining Co., with capital stock of \$240,000, by J. E. Chandler, Chas. F. Wenker, Geo. H. Blackwelder and others.

St. Louis—Lead Mines.—Queen Elizabeth Lead & Mining Co. has been incorporated, with capital stock of \$100,000, by Chas. H. Lieberman, E. F. Neillhaus and L. C. Santens.

St. Louis—Realty Company.—Oxford Place Realty Co. has been incorporated, with capital stock of \$100,000, by Harry B. Gill, Wm. P. Nelson, Lee W. Grant and others.

St. Louis—Hat Company.—Chartered: White-Branch-McConkin-Shelton Hat Co., with capital stock of \$200,000, by R. J. White, L. O. Branch, Wm. N. McConkin and Theodore Shelton.

St. Louis—Shoe Company.—Chartered: Johansen Bros. Shoe Co., with capital stock of \$125,000, by Johan Johansen, John G. Barreson, Fred H. Weber and others.

St. Louis—Oil and Grease Company.—Chartered: Chappell Oil & Grease Co., with capital of \$2000, by S. R. Chappell, A. D. Chappell and D. W. Vayles.

St. Louis—Realty Company.—Evenwood Realty Co. has been incorporated, with capital of \$2000, by John A. Anderson, James C. Jones and others.

St. Louis—Manufacturing.—Wm. A. Hall, Frederick J. Hall and E. Lewis Hall have incorporated William A. Hall Manufacturing Co., with capital of \$5000.

St. Louis—Supply Company.—Chartered: R. J. Leacock Supply Co., with capital of \$10,000, by Robert J. Leacock, Edward B. Holly and Andrew Leacock.

St. Louis—Iron Works.—National Iron Works has been incorporated, with capital of \$10,000, by John F. Hines, Wm. G. Kay-sing, John Greely and others.

St. Louis—Planing Mill.—Mechanics' Planing Mill Co., with capital stock of \$100,000, has been incorporated by Herman Schulte, C. F. Fischer, John Buck, Henry Kraemer and others.

St. Louis—Ice Plant.—St. Louis Dressed Beef & Provision Co. has awarded contract for installation of a 250-ton refrigerating machine.

NORTH CAROLINA.

Asheville—Lumber Company.—Snowbird

Lumber Co. has been incorporated, with capital stock of \$150,000, for dealing in lumber and cattle, by J. L. Rumbarger, F. T. Rumbarger and J. B. Watson of Philadelphia, Pa.; R. R. Rumbarger of Elkins, W. Va., and Buff Merrick of Asheville.

Charlotte—Mercantile.—Chartered: Adams Grain & Provision Co., with capital of \$30,000, by John H. Adams and others.

Elizabeth City—Tray and Basket Factory.—North Carolina Tray & Basket Co. will rebuild its plant at once.

Elizabeth City—Real Estate.—M. B. Culpepper, C. W. Griffin, W. T. Old and others have incorporated Culpepper, Griffin, Old & Grace Co., with capital of \$15,000, to conduct real-estate business.

Greensboro—Development Company.—Davie Street Development Co., with capital stock of \$50,000, has been incorporated by H. T. Ham, David White, A. Ramkin and others.

Hickory—Foundry and Machine Shop.—Piedmont Foundry & Machine Co. has organized, with capital of \$10,000, for establishing foundry and machine shops.

Hickory—Telephone Company.—Sunban Telephone Co., with capital stock of \$20,000, has been incorporated by J. A. Martin and J. L. Latta of Hickory, W. R. Abernathy of Newton, N. C., and others, to operate telephone lines in Catawba county.

New Stirling—Tannery.—Bradford & Sons will rebuild their tannery recently burned at a loss of \$4000.

Raleigh—Mattress Factory.—A. E. Jordan and R. E. Prince will establish mattress factory and furniture repair shop.

Reidsville—Telephone Company.—New company has been formed, with capital stock of \$20,000, to purchase and improve Reidsville Telephone Exchange.

Rockingham—Cotton Mill.—Great Falls Manufacturing Co., reported last week, will install steam plant, fire-protection equipment, electric-light system and other improvements; the 4500 spindles will be continued on coarse goods, and it is expected that 3500 will be added in the future and finer goods be produced. Contract for the new apparatus not awarded yet.

Sylva—Tannery.—Chas. J. Harris will establish a tannery and later on kaolin works.

Waynesville—Gold Mines.—Cavenders Creek Gold Mining Co., with capital stock of \$300,000, has been incorporated by Silas A. Jones, J. S. Council, Jacob J. Wild, W. B. Ferguson and others for development of gold mines.

Wilmington—Coal Mines, etc.—W. E. Worth, W. T. Shay, John S. Armstrong, Walker Taylor and George R. French have incorporated the Carolina Company, with capital stock of \$1,000,000, to engage in construction, mining, manufacturing, buying, selling coal, etc.

SOUTH CAROLINA.

Clio—Mercantile.—Chartered: J. H. Bennett Co., with capital of \$50,000, by J. H. Bennett and others.

Barnwell.—Chartered: Easterling-Patterson Company, with capital of \$25,000, by J. M. Easterling and others.

Chester—Hardware Company.—Bewley Hardware Co. will increase its capital stock to \$25,000 for extending its business.

Gaffney—Mill-supply Works.—Chartered: Southern Manufacturing & Mill Supply Co., capital \$50,000, by Harry E. Hansen of Gaffney and Thorwald Hansen of Everett, Mass. This company recently completed works for making roving cans, mill boxes, trucks, baskets, etc., used in textile mills.

Johnston—Electric Lighting.—City contemplates having its streets lighted with electricity; power to be furnished by the Johnston Machine Works.

Spartanburg—Soap Factory, etc.—Chickasaw Soap Co. will hold a meeting January 18 to decide increase of capital stock to \$100,000 for the purpose of adding the manufacture and refining of oils, etc., to its business; W. G. Darden, president.

Spartanburg—Textile-machinery Works.—Wetmore Development Co., reported recently, has organized with S. G. Finley, president; S. M. Wetmore, vice-president, and G. R. Rembert, secretary. Company will manufacture a stop-motion for drawing-frames in cotton mills.

Union—Foundry.—The foundry lately reported as being established will be operated as Moss & McCraw, instead of as W. M. Morse.

Winnabow—Publishing.—Chartered: News & Herald Co., with capital of \$5000, by J. Frank Foshee, president; W. D. Douglass, vice-president and secretary, and James Q. Davis, treasurer.

TENNESSEE.

Bristol—Cigar Factory.—C. H. Branch and E. C. Dunlap have established a cigar factory.

Chattanooga—Steel Furnaces.—It is reported that Joel Hurt of Atlanta, Ga., who owns extensive iron-ore properties near Chattanooga, is interested in a plan to construct two large open-hearth steel furnaces near Chattanooga.

Chattanooga—Cotton Mill.—Chamber of Commerce has a proposition for organization of \$300,000 company to build cotton mill.

Chattanooga—Bottling Works.—Coca Cola Bottling Works has been chartered, with capital of \$4000, by H. O. Ewing, D. F. Thomas, J. F. Johnson and others.

Clarksburg—Hardware Company.—Clarksburg Hardware Co. has been incorporated, with capital of \$15,000, by J. M. Bowling and others.

Cleveland—Electric-light Plant.—Cleveland Electric Light Co. will install within the next sixty days an alternating dynamo, 120-kilowatt, 2200 volts, 60 cycles.

Dyersburg—Electric-light Plant and Water-works.—City will issue bonds for municipal ownership of water-works and electric-light plant. Address "The Mayor."

Memphis—Tailoring.—W. W. Gregg, Robert E. Gregg, C. R. Curtis and others have formed a \$30,000 corporation for conducting general tailoring business.

Milan—Excelsior Factory.—C. F. Wolfe of Nashville, proprietor of Southern Excelsior Co., will establish an excelsior factory at Milan.

Murfreesboro—Ice Plant.—A. G. Tomkins, reported recently to erect an ice and cold-storage plant, has organized the Tomkins Ice & Produce Co. Estimates are being received on a 20-ton plant.

Shelbyville—Water-power Development.—Thomas Lynn and A. A. McCorkle have, it is reported, purchased the mill site, premises and water-power of Hopkins & Yoes (whose flour mills were lately burned), and will develop the water-power electrically for furnishing the town with water.

Wartburg—Coal Mines.—Tennessee Blue Gem Coal Co. has been organized, with capital of \$15,000, by Wm. P. Dagley, Thos. N. Rodes, Aubrey H. Gillingham and others.

TEXAS.

Abilene—Mercantile.—Abilene Dry Goods & Grocery Co. has been incorporated, with capital stock of \$100,000, by J. W. Davis, W. H. Craig, A. F. Buteman and others.

Abilene—Brick Works.—Abilene Brick Co., reported recently as incorporated, will establish a steam plant for manufacturing brick, tile, sewer pipe and other clay wares; brick capacity will be 20,000 per day. Address J. L. Stephenson.

Bay City—Rice and Irrigation Company.—B. C. Cabell, L. H. Hughes of Dallas, Texas; R. H. Taylor of Bay City and others have incorporated Trespacious Rice & Irrigation Co., with capital stock of \$50,000.

Beaumont—Lime, Cement and Brick Works.—W. A. Russell and Horace Myrick have incorporated Myrick Bros. Co., with capital of \$30,000, for manufacture of bricks, cement and lime.

Beaumont—Oil Refinery.—William Davis, representing Wheeling (W. Va.) parties, will make arrangements at El Paso, Texas, for awarding contracts for erection of a large refinery in the Beaumont district.

Beaumont—Oil Refineries.—German-American Oil Co. has decided to increase its capital stock to \$2,000,000, and will erect two oil refineries.

Beaumont—Oil Wells.—John B. Goodhue, R. L. Cox, O. B. Greeves, W. P. H. McFadden and others have incorporated the William Penn Oil Co., with capital stock of \$2,500,000.

Beaumont—Oil Pipe Line.—J. S. Cullinan, formerly of the J. S. Cullinan Co. of Corsicana, Texas, will be associated with the Texas Fuel Co. of Beaumont, recently incorporated with capital stock of \$50,000; company will build at once a six-inch pipe line to Port Arthur. Company's office is in the Exall Building.

Beaumont—Oil Refinery, Machine Shops and Foundry.—George Rush of New York, representing himself and others, has purchased eighty-nine acres of land for \$45,000 as a site for oil refinery, machine shops and foundry which it is proposed to build at a cost of \$2,000,000.

Beaumont—Oil Wells.—Harris Oil Co., with capital stock of \$100,000, has been incorporated by Dewey Heywood, Alba Heywood, W. Scott Heywood and others.

Belton—Electric-light and Power Plant.—J. F. Strickland of Waxahachie, Texas, has

been granted franchise for erection of electric-light and power plant at Belton.

Big Sandy—Cannery.—J. W. Quinn, J. Lester Williams and T. J. Sparkman, solicitors for Chicago Building & Manufacturing Co., have closed contract for establishment of a cannery at Big Sandy with capacity of 1000 dozen three-pound cans per day.

Big Springs—Lumber Company.—J. N. Rusling, W. A. Hinds and C. C. Hinds have incorporated Hinds Lumber Co.

Brenham—Oil Pipe Line.—The Red Cross Oil Co. has been chartered, with capital stock of \$250,000, into which will be merged the original Pennington & Mayfield Co., for construction of pipe lines, contracts for which have been awarded. R. E. Pennington is president; R. L. Cox, vice-president; Billy Mayfield, secretary, and W. E. Reichardt, treasurer.

Brownwood—Sewerage.—Hill & Hill of Waco, Texas, have contract at \$5000 for construction of sewerage system.

Buffalo—Mercantile.—Chartered: J. P. Parker Co., with capital of \$10,000, by J. P. Parker and others.

Cleburne—Gas Plant.—Cleburne Water, Ice & Lighting Co. has received franchise for erection of a gas plant.

Collinsville—Grain House.—H. Waldo will replace his burned grain house with a brick structure; will install conveying and cleaning machinery.

Commerce—Mercantile.—Chartered: Commerce Mercantile Co., with capital of \$30,000, by W. J. Taylor and others.

Dallas—Mercantile.—Chartered: S. A. Nance Company, with capital of \$30,000, by S. A. Nance and others.

Dallas—Macaroni Factory.—Carliss & Tolbi have established macaroni factory at 258 Live Oak street.

Dallas—Mercantile.—Chartered: W. F. Bell Produce Co., with capital of \$2500, by W. F. Bell and others.

Dallas—Mercantile.—Chartered: Jackson-Steer Grocery Co., with capital of \$10,000, by Wm. M. Earnest and others.

Dallas—Ice Plant.—Dallas Ice Factory, Light & Power Co. has awarded contract for installation of a 250-ton ice plant.

Dallas—Cotton-gin Foundry.—The Murray Company has increased its capital stock from \$300,000 to \$400,000.

El Paso—Pintsch-gas Plant.—Plant will be established for the manufacture of Pintsch gas, and it is said that J. S. Dixon, representing Pintsch Gas Co. of New York, has completed arrangements for erection of necessary buildings.

El Paso—Wire Factory.—John Ashcroft, 910 Mesa avenue, is in correspondence with Eastern parties relative to establishing a copper-wire factory in El Paso.

Houston—Rice Mill.—Houston Rice Milling Co. has been incorporated, with capital of \$50,000, and will erect large rice mill and warehouse. Bryan Heard is president; De Lancey Evans, vice-president, and Bernard Brown, secretary and treasurer.

Houston—Electrical Company.—Houston Electric Manufacturing Co., with capital stock of \$10,000, has been incorporated to handle electric supplies by H. W. Cortes, T. H. Thompson, T. C. Copping and others.

Houston—Railroad Improvements.—Southern Pacific Railroad Co. will expend \$275,688 in the erection of new buildings and \$149,810 in construction of bridges and culverts during the year; W. G. Van Vleck, manager transportation department.

Houston—Wire-fence Factory.—Addison Barr of Battle Creek, Mich., is reported to establish a plant in Houston to manufacture wire fencing and wire-fence machines.

Houston—Power-houses.—See item in "Machinery Wanted" under subheading of "Power-houses."

Kaufman—Water-works.—City has now on view plans and specifications for the construction of its proposed water-works, and bids will be opened this month. Address Geo. G. Shaw, mayor.

Kemp—Mercantile.—Chartered: Kemp Mercantile Co., with capital of \$20,000, by M. D. Rutland and others.

Matagorda—Irrigation Plant.—Messrs. Hughes and Cabel of Dallas, Texas, are interested in the formation of company for constructing system to irrigate 10,000 acres of rice lands at Matagorda.

Midlothian—Grain Elevator.—W. W. Major will rebuild his grain elevator, burned at a loss of \$15,000.

Mt. Pleasant—Electric-light Plant.—M. Greenspun, manager and owner of the Mt. Pleasant Telephone Exchange, contemplates erecting an electric-light plant.

Nacogdoches—Oil-burner Factory.—Messrs. Barron & Demory have patented an oil

burner, and will erect a plant for its manufacture.

Nacogdoches—Drug Company.—Chartered: R. T. Shindler Drug Co., with capital of \$30,000, by R. T. Shindler and others.

San Antonio.—Texas Hot Sulphur Water Sanitarium Co. has increased capital from \$120,000 to \$150,000.

San Antonio—Roundhouse and Depot.—International & Great Northern Railway Co. will, during the year, include in its many improvements the erection of a \$55,000 depot and \$23,000 roundhouse at San Antonio; Leroy Trice, general superintendent, Palestine, Texas.

Stamford—Cotton-oil Mill.—S. M. Swenson & Sons of New York will erect a cottonseed-oil mill at Stamford.

Wallisville—Electric Plant, Water-works and Ice Plant.—Texas Oil Land & Investment Co. will build an electric-light plant, as recently reported, of 2300 incandescent lights; will also construct a system of water-works and erect a 25-ton ice plant; O. H. De Lamorton, general manager.

Weatherford—Woolen Mill.—Ajax Textile Co. has been organized, with \$50,000 capital, to establish the woolen mill lately reported; G. M. Bowie, president; C. D. Hartnett, secretary, and A. F. Parker, general manager.

Weatherford.—Chartered: Standard Bale Wire Buckle Co., with capital of \$25,000, to manufacture wire buckles for cotton ties, by R. H. Felton, G. P. Levy and W. H. Eddleman.

Wharton—Electric-light Company.—Tom C. Gordon will organize a \$10,000 stock company and apply for franchise for erection of electric-light plant.

VIRGINIA.

Berkley—Drug Company.—Chartered: Slaymaker Pharmacy Co., capital \$5000, with A. P. Slaymaker, treasurer, and J. M. Woodside of Norfolk, secretary.

Dendron—Lumber Mills.—Surrey Lumber Co. will enlarge its plant, increasing capacity from 125,000 to 250,000 feet of pine lumber per day.

Falls Church—Milling.—West Falls Church Milling Co. has been incorporated, with capital of \$10,000, to conduct milling and feed business, by C. C. Waters of Falls Church, E. B. White of Leesburg, Va.; J. B. Anderson of Fostoria, Va., and others.

Norfolk—Wood-product Factory.—Reynolds Manufacturing Co., with capital of \$50,000, has been incorporated for manufacture of wood products. J. M. Reynolds is president.

Norfolk—Mercantile.—Chartered: M. L. T. Davis Co., with capital stock of \$100,000, by M. L. T. Davis and others.

Norfolk—Bridge.—Norfolk Railway & Light Co. will construct bridge between Norfolk and Berkley if franchise is granted by legislature.

Norfolk—Mantel Factory.—Norfolk Hardware Co., recently incorporated, has increased capital stock from \$5000 to \$10,000. Company will manufacture materials of wood, including wood mantels.

Petersburg—Saw and Planing Mill.—E. M. Field and associates will erect a saw and planing mill.

Richmond—Mining and Milling.—Pittsburg Mining & Milling Co. has increased capital from \$50,000 to \$100,000.

Richmond—Glass Company.—Continental Glass Co. has been incorporated, with capital of \$25,000, for manufacture of glass and glassware. S. B. Dunston is president; C. F. Sauer, treasurer, and J. E. Fowler, secretary.

Richmond—Dental Supply Company.—Owens-Grant Dental Supply Co., with capital of \$25,000; S. P. Owens of Norfolk, president; A. Grant, vice-president, and W. P. Chandler, secretary.

Richmond—Electric Advertising Company.—Electric Advertising Co. has been incorporated, with capital of \$5000, to conduct general advertising business by means of electrical devices. Andrew Pizzini, Jr., is president; William Todd, vice-president; Andrew J. Pizzini, secretary.

Roads—Clothing Company.—Airheart-Kirk Clothing Co. has been incorporated, with capital of \$20,000, by A. J. Airheart, president and general manager, and W. E. Airheart, vice-president.

WEST VIRGINIA.

Bluefield—Sewerage.—City has decided affirmatively the issuance of \$35,000 for construction of sewerage system. Address "The Mayor."

Cameron—Bakery.—J. Schumacher of Moundsville, W. Va., will establish bakery and residence at Cameron.

Charleston—Coal Mines, Coke Ovens, etc.—United States Steel Corporation (E. H. Gary,

chairman, New York city) has leased from the Pocahontas Coal & Coke Co. and will develop 50,000 acres of coal lands. Extensive mines will be opened, 3000 ovens will be constructed for an annual output of 1,500,000 tons of coke; also will be built mining plants, railways, water-works, etc.

Clarksburg—Town Development.—Riverside Development Co. has been organized to build a suburban town on thirty-five acres, manufacture brick and lumber, install electric plant and water-works, by Dr. John B. Smith and others.

Clarksburg—Coal Mines.—Robert E. Umbel of Uniontown, Pa., has purchased 532 acres of coal lands near Clarksburg for \$53,000.

Colfax—Brick Works.—New company will be organized to operate the Colfax Red Brick Works, which have been idle for six months; many improvements will be made. Address Thomas Williams.

Dingess—Coal Mines.—John A. Clark of Fairmont, W. Va., who purchased the plant and holdings of Pearl Coal Co., as lately reported, has organized the Pearl Mining Co., with capital stock of \$35,000.

Grafton—Pump Works.—O. G. Augir has purchased the Grafton Pump Factory, will install new machinery and operate same.

Mannington—Glass Works.—Manning Glass Works Co., previously reported to enlarge its plant for the manufacture of milk jars by erection of an additional building and installation of new machinery, has been incorporated, with capital stock of \$50,000, by V. T. Clayton, H. E. Travis, A. G. Clayton and others.

Mannington—Medicine Factory.—Southern Medicine Co., recently purchased by Caleb Bruce and others, will erect factory for the manufacture of hair restorer.

Mount Hope—Coal Mines, etc.—Chartered: Mount Hope Coal & Coke Co., with capital of \$25,000, by A. P. Bailey, R. F. Bailey, A. M. Brown and others.

Sweet Springs—Slave Mill.—Curran & Lewis contemplate establishing a plant for the manufacture of barrel staves.

Wellsburg—Carriage and Coal-car Works.—Mahan & Hamilton have bought 300 acres of land, and will build large carriage and coal-car works; details of the project have not been announced.

Wheeling—Land Improvement.—Wheeling Improvement Co. has commenced work on improvements proposed at Glenn's Run. Streets will be laid out and a complete suburban town developed.

Wheeling—Structural-Iron Plant.—A company will, it is reported, be organized, with capital stock of \$140,000, to build and operate a plant for the manufacture of bridge and structural iron. Address the Board of Trade.

INDIAN TERRITORY.

Claremore—Hardware Company.—Chartered: Henley Hardware Co., with capital stock of \$5000, by Robert L. Hill, Davis Hill and E. N. Henley.

Eufaula—Mercantile.—Tully Mercantile Co. has been incorporated, with capital of \$100,000, by C. H. Tully and others.

Muscogee—Mining.—Chartered: Mineral Development Co., with capital stock of \$100,000, by R. L. Owens, John Morton and Myrtle Hale.

South McAlester—Mercantile.—Chartered: Head Mercantile Co., with capital of \$12,000, by Truxon Head and others.

South McAlester—Mining.—Tobucksy Mining Co. has been incorporated, with capital stock of \$100,000, by Jeff Truly, L. Hirsch, L. Cohn and others.

OKLAHOMA TERRITORY.

Granite—Oil Company.—Red River Oil Co. has been incorporated, with capital stock of \$750,000, by C. H. Myers of Granite, Fred L. Getty of Chicago, Ill.; J. B. Lenertz of Granite and others.

Oklahoma City—Mining.—Cleo Copper Mining Co., with capital of \$25,000, has been incorporated by John E. Mincher, Wiley Brown, W. H. Murphy and others.

Oklahoma City—Realty.—Park Site Realty Co., with capital of \$16,000, has been incorporated by Guy E. Blackwelder and others.

Oklahoma City—Grain Company.—Chartered: J. C. Rabb Grain Co. of Kingfisher and Oklahoma City, O. T., and Chickasha, I. T., with capital stock of \$50,000.

Sayre—Lumber Mills.—Chartered: Western Lumber Co., with capital stock of \$20,000.

Watonga—Ice Company.—Chartered: Watonga Crystal Ice Co., with capital of \$20,000.

BURNED.

Auburn, Ala.—J. M. Thomas' cotton gin; estimated loss \$4000.

Clarksburg, W. Va.—Glen Elk brick plant, owned by William Wilkinson and William Thompson; estimated loss \$20,000.

Clifton, Texas.—Earnest & Sanders' cotton gin; loss \$3000.

Duncans, S. C.—W. A. Moore's flour mill; estimated loss \$3500.

Greenville, Texas.—Storage building of American Cotton Co.; estimated loss \$5000.

Haskell, Texas.—Sanders & Earnest's cotton gin; estimated loss \$3500.

Lumber City, Ga.—T. W. Garbutt & Co.'s lumber mill.

Meridian, Miss.—The fertilizer department of the Mississippi Cotton Oil Co.; estimated loss \$37,000.

Nashville, Tenn.—Vendome Theater; estimated loss \$50,000.

Port Tampa City, Fla.—M. J. Castro & Co.'s cigar factory.

Richmond, Va.—Alexander Cameron & Co.'s tobacco factory; estimated loss \$100,000.

Sewanee, Tenn.—Sewanee Steam Laundry; estimated loss \$4500.

Thomasville, N. C.—Climax Chair Co.'s factory; estimated loss \$12,000.

Warrenton, Ga.—B. L. Battle Manufacturing Co.'s knitting mill; loss \$30,000.

BUILDING NOTES.

Annapolis, Md.—Hotel.—Wm. A. Larned of New York has purchased site at Annapolis for \$15,000, and will erect a large hotel.

Anniston, Ala.—Building.—Charles Nonnemacher will erect a two-story building to cost \$10,000.

Atlanta, Ga.—Apartment-house.—J. F. Leary is having plans made for erection of a 10-story apartment-house, of brick and steel, to cost about \$200,000. Address 243 Peachtree street.

Atlanta, Ga.—Theater.—W. R. Gunn is preparing plans for the proposed theater to be erected by R. Coley Anderson, recently reported.

Baltimore, Md.—Store Building.—Frank J. Murphy will erect a six-story fireproof store building on Lexington street, to cost \$100,000.

Baltimore, Md.—Hotel.—Robert A. Taylor, Edward J. Bond, S. Miles Brinkley, Horace Slinguff and others will incorporate the Mt. Royal Hotel Co. for erection of eight-story structure, plans for which have been prepared by Glidden & Myers. E. M. Noel will erect building.

Beaufort, S. C.—Hotel.—Nells Christensen has submitted plans for erection of the proposed \$5000 hotel at Beaufort. Address for particulars Board of Trade.

Beaumont, Texas.—Business Building.—H. A. Perlestein will erect a three-story brick business building 100x30 feet. J. B. Brechen will superintend.

Belton, Texas.—Hotels.—Chartered: Central Company, with capital stock of \$20,000, for establishing hotels, by S. M. Ray, G. W. Cole, Jr., and others.

Birmingham, Ala.—Business Building.—Wood, Dickinson & Co. will erect a four-story business building to cost \$25,000.

Birmingham, Ala.—Dwellings.—Otto Marx as trustee has purchased site at \$18,000, on which he will erect four large dwellings.

Birmingham, Ala.—Labor Temple.—Labor Temple Association has been incorporated, with capital stock of \$20,000, for the erection of temple, by P. H. Moore, W. C. Cunningham, Fred Harris and others.

Birmingham, Ala.—Theater.—J. B. Frost and R. Coley Anderson of Atlanta, Ga., and T. H. Bowles of Milwaukee, Wis., have incorporated Anderson Southern Theatrical Circuit, with capital stock of \$100,000.

Clarksburg, W. Va.—Department Store.—D. W. Jacobs will have plans made for erection of a three-story brick department store 50x190 feet.

Columbia, S. C.—Warehouse.—Union Warehouse Co. has been incorporated, with capital stock of \$100,000, by W. A. Clark, W. C. Childs, W. B. Smith Whaley and others.

Columbus, Ga.—Business Building.—Richard W. Needham has awarded contract for erection of a four-story business building to Barlow Bros.

Denison, Texas.—Hotel.—Denison Hotel Co. will receive bids up to January 15 for remodeling building for its proposed hotel, reported recently. Plans can be seen at offices of J. Riley Gordon Co., architect, Dallas; of Burton-Lingo Lumber Co., Fort Worth, and of State National Bank, Denison. Separate proposals will be received for elevators, steam heating, plumbing and electric work; G. L. Blackford, secretary.

El Paso, Texas.—Dwellings.—Senator E. T. Turney will erect two-story brick residence

to cost \$15,000; John Dyer, brick residence to cost \$5000; H. R. Wood, \$5000 brick residence; Mrs. Chas. A. Fox, \$4000 brick residence; Rev. John F. Kellogg, \$3000 brick residence; W. R. Slinkard, \$5000 brick residence, and J. M. Flenniken, residence.

El Reno, O. T.—Sanitarium.—Dr. J. A. Hatchett and Dr. H. C. Shuttet will erect sanitarium, plans for which are being prepared.

Enfield, N. C.—Store Building.—Dr. A. S. Harrison will erect store building.

Fairmont, W. Va.—Theater.—Nelson & Gallagher will erect a new theater with seating capacity for 1000, after plans prepared by Geo. D. Griffin & Co. Contracts will be awarded shortly.

Galveston, Texas.—Depot.—Southern Pacific Railroad Co. will erect two-story brick depot at Galveston 300x60 feet; E. H. Harrison, New York city, president.

Galveston, Texas.—Hotel.—Chartered: Grand Hotel Co., with capital stock of \$50,000, by M. Marx, B. Adoue and M. C. Michael.

Houston, Texas.—Schools.—Contracts have been awarded A. Heidelberg at \$16,800, R. S. Lane at \$7200, R. S. Lane at \$5926, and to J. Stodder at \$15,403 for erection of schools.

Huntsville, Ala.—Opera-house.—Herbert Cowell has prepared plans for the proposed \$20,000 opera-house.

Lexington, Va.—Bank Building.—First National Bank has awarded contract to C. W. Hancock & Sons of West Appomattox, Va., for erection of its proposed three-story building.

Louisville, Ky.—Warehouse.—Dodd & Cobb have made plans for brick warehouse for Illinois Glass Co. to cost \$25,000.

Macon, Ga.—Business Building.—Mrs. T. C. Dempsey will erect a four-story business building.

Marion, S. C.—Depot.—Carolina Northern Railroad will build depot at Marion; T. C. McNeely, general superintendent, Lumberton, N. C.

Mineral Wells, Texas.—Sanitarium.—Chartered: Mineral Wells Sanitarium Co., with capital of \$25,000, by William O'Brien and F. G. Highsmith.

Nashville, Tenn.—Theater.—Vendome Theater, recently burned at a loss of \$25,000, will be rebuilt.

Navasota, Texas.—Residence.—Buck Sangster is erecting a \$10,000 residence.

New Orleans, La.—Hotel.—St. Tammany Health Homes Co., lately reported as incorporated to own and conduct the town of St. Tammany, and to improve same by laying out streets, erecting cottages, hotels, etc., has had plans for its hotel made by Stone Bros.; building will be constructed of brick, with capacity of 200 rooms, and equipped with electric plant, ice plant and all modern improvements; J. P. Adams, secretary.

Norfolk, Va.—Hotel.—Wyatt & Nolting of Baltimore, Md., have prepared plans for erection of a seven-story hotel at Norfolk to be known as "The Buckingham;" steel construction, 115x57 feet, and cost \$150,000.

Oklahoma City, O. T.—Business Building.—Chas. F. Gilpin will erect large business building.

Oklahoma City, O. T.—Business Building.—Curtis Lumber Co. has had plans made for erection of a four-story wholesale building 200x170 feet.

Oklahoma City, O. T.—Business Building.—J. J. Culbertson will erect four-story business building 140x140 feet, equipped with all modern improvements.

Parkersburg, W. Va.—Cottages.—Beechwood Improvement Co. is being organized, with capital of \$50,000, for erection of operatives' dwellings, etc.

Pensacola, Fla.—Hotel.—M. H. Judd of Dixon, Ill., will erect a three-story brick hotel.

Plains, Ga.—Bank Building.—Bank building will be erected. Address W. L. Thomas.

Raleigh, N. C.—Warehouse.—W. S. Forbes & Co. have let contract to E. L. Harris for erection of a \$1000 warehouse.

Richmond, Va.—Warehouse.—E. A. Saunders' Sons Co. is having plans made for erection of warehouse; cold-storage plant and coffee-roasting room will also be added.

Richmond, Va.—Auditorium.—Fritz Sitterding has contract at \$5000 for alterations and improvements to the Auditorium.

Richmond, Va.—Hotel.—Fritz Sitterding has submitted lowest bid (\$135,000) for building second section of 100 rooms for Jefferson Hotel; hotel is being erected in three sections.

Seymour, Texas.—School.—Architects are invited to submit estimates January 14 for construction of school building to cost \$19,000. Address H. D. Hockersmith, secretary.

Sheffield, Ala.—Buildings.—J. M. Hughes of Beaver Dam, Pa., has been awarded contract for erection of \$20,000 worth of new buildings at Sheffield.

Tampa, Fla.—Courthouse, etc.—Date of opening bids for erection of United States courthouse, etc., building has been postponed from February 3 to 15; J. K. Taylor, supervising architect, Washington, D. C.

West Point, Va.—Hotels, etc.—Beach Park & Hotel Co. has been incorporated, with capital stock of not less than \$25,000 nor more than \$50,000, to conduct and manage hotel, summer resorts, etc. Geo. C. Guvernator is president; T. A. Hulcher, vice-president, and G. E. Perkinson, treasurer.

Wheeling, W. Va.—Bank Building.—Wm. H. Hearne, 80 South Front street, is having plans made for erection of bank building.

RAILROAD CONSTRUCTION

Railways.

Ackerman, Miss.—The citizens of Ackerman are interested in plans to construct two railroad lines through Choctaw county.

Alexandria, La.—It is announced that Messrs. Epple & Hayes have secured additional contracts to grade fourteen miles of the Shreveport & Red River Valley Railroad from Campt north. Work is to begin immediately. P. McIlvried at Shreveport is general manager.

Baltimore, Md.—The Baltimore & Frederick Electric Railway Co., promoting the proposed line between these points, has been incorporated, with \$1,500,000 capital stock. The estimated length of the road is forty-five miles, and it is proposed to build from the western suburbs of Baltimore along the Liberty turnpike. The company includes Frank H. Calloway and James E. Ingram, Jr., of Baltimore.

Batesville, Ark.—Russell Harding, vice-president of the Missouri Pacific Railroad Co., informs the Manufacturers' Record that the extension of the White River Railroad beyond Batesville will be about twenty miles in length, to terminate at phosphate deposits in this section of the State. Mr. Harding may be addressed at St. Louis, Mo.

Blountville, Tenn.—The South & Western Railway Co. has been chartered in Nashville, with \$100,000 capital stock, to build from a point on the North Carolina-Tennessee line to the Virginia-Tennessee line in Sullivan county. The incorporators include Tate L. Earnest of Johnson City, Tenn.

Bluefield, W. Va.—It is stated that a New York syndicate has become interested in a proposed electric line between Bluefield and Welch, a distance of forty-two miles. J. W. Reardon is mentioned as among the promoters.

Brownsville, Texas.—It is reported that Detroit capitalists have become interested in a plan to build a railroad between Corpus Christi and Brownsville, a distance of 165 miles. The business men of Corpus Christi have organized a committee, of which C. C. Heath is chairman, to assist in promoting the enterprise.

Cape Girardeau, Mo.—B. F. Johnston has secured the contract to construct the Cape Girardeau & Northern Railroad, projected between Cape Girardeau and Crystal City, a distance of ninety-six miles. The line will be a branch of the Southern Missouri & Arkansas Railroad. S. B. Coombs at Cape Girardeau is engineer.

Clarksburg, W. Va.—The Clarksburg & Southern Railroad Co., it is reported, has made surveys for a line from Clarksburg to a point in Gilmer county along what is known as Freeman's creek valley.

Clay, W. Va.—The Charleston, Clendennin & Sutton Railroad Co. has completed an extension from Charleston to Otter, and it is understood will build to Sutton during the present year. C. C. Lewis at Charleston is vice-president of the company.

Cleburne, Texas.—Mr. G. A. Human, one of the promoters of the railroad between Cleburne and Fort Worth, writes the Manufacturers' Record that preliminary surveys have been completed, and that contracts for right of way have been made. The road will be about twenty-eight miles in length.

Dothan, Ala.—Grading is in progress upon the Dothan, Hartford & Florida Railroad between Dothan and St. Joseph, Fla., a distance of 135 miles. Several miles of track have also been laid. Among those interested is J. P. Pelham of Dothan.

Florence, S. C.—W. L. Rankin and N. S. Gibson are reported as interested in a railroad which is being surveyed from Florence to a point on the Pee Dee river, an estimated distance of sixty miles.

Graham, Texas.—It is announced that the Chicago, Rock Island & Texas Railroad Co.

is considering an extension of its line from Jacksboro to Graham. The estimated length of the extension is about thirty miles. S. B. Hovey at Fort Worth is vice-president and general superintendent of the company.

Hackley, La.—The latest report concerning the Kentwood & Eastern Railroad is to the effect that it is to be extended from Hackley to Balltown, a distance of twenty-one miles. George Hoskins of Kentwood is chief engineer of the company.

Houston, Texas.—A recent conference of the promoters of the Houston, Brazos & Northern Railroad Co. was held in New York, and it is understood that work may begin within the next two months, as considerable right of way has been secured. The estimated length of the line in Texas is 300 miles. R. N. Hall at Houston is president of the company.

Houston, Texas.—General Manager Leroy Trice of the International & Great Northern Railroad has recently made an examination of the country between Houston and Beaumont. It is understood, with the idea of building an extension of the International & Great Northern between these cities. Mr. Trice may be addressed at Palestine.

Joplin, Mo.—It is reported that the Missouri, Kansas & Texas Railroad Co. will extend its line between Webb City and Joplin at once. S. B. Fisher at St. Louis is chief engineer of the company.

Kansas City, Mo.—A London dispatch states that English capitalists have furnished the necessary capital to insure the building of the Kansas City, Mexico & Orient Railroad in Mexico, and that a contract has been made for the necessary rails to lay 600 miles of the line. A. E. Stilwell is president of the company.

Lawton, Okla.—A charter has been granted to the promoters of the railroad between Lawton and Mt. Scott under the title of the Lawton & Wichita Mountain Railway Co. It is capitalized at \$300,000. Among those interested is L. P. Ross of Lawton and C. W. Parker of Abilene.

Lebanon, Tenn.—The extension of the Tennessee Central Railroad between Lebanon and Nashville has been completed a distance of twenty-one miles. It is announced that surveys are being completed with a view to building an extension from Nashville to Clarksville during the present year. Jere Baxter at Nashville is president of the company.

Lexington, Ky.—The electric railroad under construction between Lexington and Georgetown is to be completed by March 1. Younger Alexander at Brooksville, Ky., is president of the company.

Lincoln, I. T.—H. W. Seaman, president of the Ozark & Cherokee Central Railroad Co., informs the Manufacturers' Record that this line, in operation between Fayetteville and Lincoln, a distance of twenty-one miles, is being completed to Westville. Contracts have been let for a further extension from Westville to Muskogee, I. T., a distance of sixty miles. At Muskogee it will connect with the Shawnee, Oklahoma & Missouri Coal Railway, being built by the Kanefick Construction Co. of Kansas City, Mo., between Muskogee and Shawnee, Okla., a distance of 101 miles. The latter line will be under the same ownership as the Ozark & Cherokee Central. The entire system will be about 200 miles in length. Mr. Seaman may be addressed at Clinton, Iowa.

Marion, S. C.—Augustus Meiller, president of the Carolina Northern Railroad Co., writes the Manufacturers' Record that surveys are being made for an extension of this line south from Marion, S. C., the present terminus. It is stated that contracts for construction will probably be let in about two months. Mr. Meiller may be addressed at 316 Bourse Building, Philadelphia.

Monroe, La.—A. M. Bannister of Detroit, Mich., is interested in the Louisiana Midland Railroad, being promoted from Monroe to Beaumont, Texas. Surveys have been completed between Monroe and Natchitoches.

Montgomery, Ala.—W. W. Summerlin, mayor of Tallapoosa, is interested in a project to build a railroad between Tallapoosa and Montgomery, an estimated distance of 135 miles. A company has been formed with George O. Vanderbilt of Princeton, N. J., as president; William H. Martin of Frenchtown, N. J., vice-president, and Mr. Summerlin as general manager. The directors include Mr. Martin, who is president of the Union National Bank of Frenchtown, and A. B. Haring, cashier of the same institution.

Morgan City, La.—Surveys are being made in the interest of a railroad between Morgan City and Luling, Texas, by way of Houma. A. Corbin is engineer.

New Orleans, La.—A. M. Humphries is interested in a plan to build a railroad be-

tween New Orleans and Morgan City, an estimated distance of seventy miles. A company called the New Orleans Southwestern Railroad Co. has been organized to take up the project.

Oklahoma City, Okla.—G. W. Baumhoff of St. Louis is interested in constructing the proposed electric railroad in Oklahoma City and suburbs, and is also president of the Oklahoma City & Canadian Railway Co., which proposes building through a portion of the Territory.

Orange, Texas.—John W. Maxcy, assistant to the president, writes the Manufacturers' Record that an extension of the Orange & Northwestern road five miles in length is to be built to South Orange, and a northern extension from Buna to Marshall. It is further proposed to extend it from Buna to Corsicana, and surveys are to be made immediately with a view of letting contracts within the next three months. The extensions will aggregate 325 miles. Mr. Maxcy may be addressed at Houston, Texas.

Paris, Texas.—W. J. Kirkpatrick of Cleveland, Ohio, is reported as interested in a plan to build an electric railroad between Paris and the town of Blossom, Texas; also between Terrell and Kaufman.

Princeton, Ark.—The Wisconsin & Arkansas Lumber Co. is constructing a railroad which will terminate at a point near Princeton, and will be fifteen miles in length.

Reidsville, N. C.—The report that the Southern Railway Co. may construct a branch between Reidsville and Kernersville to shorten its route between Washington and Atlanta has been revived. The estimated distance is forty miles. W. H. Wells at Washington is engineer.

Roanoke, Va.—Z. T. Kale of Newcastle, Va., is reported as interested in a plan to build a railroad between Roanoke and Newcastle through a portion of the Catawba valley.

San Antonio, Texas.—Surveys have practically been completed for the proposed extension of the St. Louis & San Francisco system between San Antonio and Brownwood, Texas. B. F. Yoakum at St. Louis is president of the company.

San Augustine, Texas.—C. F. W. Felt of Galveston, chief engineer of the Gulf, Colorado & Santa Fe Railway Co., informs the Manufacturers' Record that the Old Colony Contracting Co. has received the contract for the completion of this line to San Augustine, and that all of the necessary material has been arranged for.

Seguin, Texas.—The Seguin & Southwestern Railroad Co. has been chartered in Texas to build a railroad from Seguin to some point between New Braunfels and San Marcos, connection to be made with the International & Great Northern or the Missouri, Kansas & Texas. The company is capitalized at \$100,000. Among those interested are C. E. Tips and T. H. Baker of Seguin.

Shawnee, Okla.—It is announced that the work of grading the extension of the Atchison, Topeka & Santa Fe system from Ripley to Shawnee has begun with a view to completing it by July 1. C. F. W. Felt at Galveston, Texas, is engineer.

Sherman, Texas.—The Denison & Northern Railroad project, it is stated, has been revived by a company which includes L. K. Stone of Joplin, Mo., and J. D. Junkins of Philadelphia. It is proposed to build from Sherman to a point near Coalgate, I. T.

Sistersville, W. Va.—It is reported that another plan is under way to build a railroad from Sistersville to a point in Ohio, bridging the Ohio river. The proposed western terminus is Toledo.

Tuscaloosa, Ala.—Woolsey Finell of Tuscaloosa has been appointed engineer to survey the proposed Mobile & West Alabama Railroad between Tuscaloosa and Florence, a distance of 120 miles.

Valdosta, Ga.—Final surveys are being made for the extension of the Atlantic, Valdosta & Western Railroad between Valdosta and Albany, Ga. F. W. Long at Jacksonville is chief engineer.

Waxahatchie, Texas.—A correspondent of the Manufacturers' Record writes that an application for a franchise to construct the proposed electric railroad between Waxahatchie and Ennis has been filed with the city council. The road, if constructed, will be about fifteen miles in length.

West Point, Miss.—The West Point & Houston Railroad Co. has been incorporated to construct a road through Clay and Chickasaw counties. The incorporators include R. C. Beckett and N. W. Bradford.

Street Railways.

Atlanta, Ga.—The residents of Westwood Park are conferring with the Atlanta Railway & Power Co. with the view to securing

an extension of its trolley system to the suburb referred to.

Birmingham, Ala.—It is reported that the Birmingham Railway, Light & Power Co. has determined to expend an additional sum for extensions and improvements besides the amount already appropriated. The total outlay is estimated at \$1,500,000. Robert Jemison is president of the company.

Winchester, Ky.—E. S. Jouett, president of the Winchester Railway, Light & Ice Co., informs the Manufacturers' Record that the present street-car system will be rebuilt for the use of trolley motors. The company has purchased the present railway, also the electric-light plant, which will be rebuilt. The company is capitalized at \$100,000.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Boiler.—Hercules Gold & Copper Co., Old, N. C., is in the market for 100-horse-power boiler, new or second-hand.

Boiler and Engine.—See "Saw-mill."

Boilers and Engines.—Kentucky Fluor Spar Mining & Milling Co., Paducah, Ky., is in the market for crushers, engines, boilers, etc. Address care of Bloomingfield & Co.

Boilers and Engines.—Box 440, Middleport, Ohio, wants Corliss engine from 150 to 200 horse-power, 18x24-inch common slide-valve engine, and battery of two boilers (with no stack) 54x16 inches, with six-inch flues riveted in heads.

Bridge.—Specifications and bids for construction of steel and wood bridge across Colorado river will be received until January 21. For particulars address Jesse Matthews, county judge, Bay City, Texas.

Canal Construction.—See "Grading Work."

Coffin Machinery.—See "Woodworking Machinery."

Cotton Mill.—See "Textile Machinery."

Cotton Oil Mill.—Planters' Cotton Oil Works, Clarksdale, Miss., will award contract January 15 for furnishing machinery for four-press cottonseed-oil mill; specifications furnished to bidders. Address Chas. L. Wortham, manager.

Crushers.—See "Boilers and Engines."

Diving Apparatus.—J. S. Cock of Christiania, Norway, wants addresses of manufacturers of diving apparatus.

Electrical Work.—R. M. Love, State comptroller, Austin, Texas, will open bids January 25 for plumbing and electrical work on State epileptic colony being built at Abilene. Plans and specifications with J. L. O'Connor, architect, Austin.

Electrical Work.—See "Building Note" of hotel at Denison, Texas.

Electric Lighting.—City of New Orleans, La., will open bids March 24 for constructing system for lighting the public highways by electricity and operating the same for ten years. A deposit of \$25,000 with the city treasurer will be required. W. J. Hardee, city engineer, can be addressed for blank forms of proposals, specifications, etc.

Electric-light Plant.—M. Greenspun, manager of the Mt. Pleasant (Texas) Telephone Exchange, wants to correspond with manufacturers of electric-light plant machinery.

Electric-light Plant, etc.—Texas Oil Land & Investment Co., O. H. De Lamorton, president and general manager, Wallisville, Texas, wants exact bids on 2300-incandescent-light plant, water-works machinery, 25-ton ice plant and saw-mill machinery; company wants at once lowest sealed confidential prices for cash.

Electric-light Plants.—C. P. Chennault, secretary People's Electric Light & Power Co., Frankfort, Ky., wants estimates on plant to furnish 400 incandescent and twelve arc lights, latter for street lighting; also on plant to furnish 3000 incandescent and 120 arc lights for street lighting.

Elevator.—See "Heating and Lighting Apparatus."

Elevators.—See "Building Note" of hotel at Denison, Texas.

Engine.—See "Tobacco Machinery."

Engines.—See "Grist Mills."

Foundry Equipment.—See "Machine Tools."

Grading Contracts.—John W. Maxey, consulting engineer, 204 Binz Building, Houston, Texas, will open bids January 16 for constructing canal levees at a point five miles from a railroad station thirty miles from Houston; approximate quantity 200,000 cubic yards, all borrow and waste; forms of proposals, profiles, specifications, etc., at engineer's office; \$1000 check must accompany each bid.

Grading Work.—W. S. Millikin, chief engineer, 609 Travis street, Houston, Texas, will open bids January 7 for constructing canal and levees three miles from Duke, Texas; about 350,000 cubic yards, all borrow and waste; forms of proposals, profiles, etc., on view; \$1000 check must accompany each bid.

Grinding Mill.—See "Spice Mills."

Grist Mills.—J. C. Hutchins, Pensacola, N. C., wants catalogues and prices of steam engines and grist mills.

Heating.—See "Building Note" of hotel at Denison, Texas.

Heating and Lighting Apparatus.—Wood, Dickerson & Co., Birmingham, Ala., want information regarding best mode of heating and lighting store building, also of operating elevator.

Horseshoes.—See "Vehicle Materials."

Ice Plant.—See "Electric-light Plant, etc."

Ice Plants.—C. P. Chenault, secretary People's Electric Light & Power Co., Frankfort, Ky., wants probable cost of ice plant, one to twenty-five tons per day.

Kilns.—See "Lime-kilns."

Kitchen Equipment.—J. G. Wilbraham, proprietor Hotel Monroe, Portsmouth, Va., will be in need of dishwashing machine and other equipment for hotel kitchen.

Lime-kilns.—Carroll & Co., Lessees, Gaffney, S. C., want plans and specifications for modern perpetual lime-kilns and constructor for same.

Machine Shop.—E. P. Armstrong, Dew Drop, Pa., wants addresses of shops equipped to drill, tap and mill out blocks of annealed tool steel two and one-quarter inches diameter and two inches long, in lots of six or more at a time; also for making headless steel screws five-eighths inch, ten threads, for steel that can be hardened on the end; should be tool steel.

Machine Tools.—Heywood Bros. & Dobbs, Jennings, La., are in need of a gang or multiple drill for drilling well castings, and a pipe-threading machine.

Machine Tools.—G. T. Glascock & Sons, Greensboro, N. C., want prices on a universal milling machine, 16-inch shaper, keyseater and bolt machine.

Machine Tools.—J. F. Denihan, 450 Hamilton avenue, Brooklyn, N. Y., wants 30-inch lathe, short bed (dealers' prices).

Mining Equipment.—Oliver Coal Co., Oliver Springs, Tenn., wants estimates on haulage plant (rope, electric or gasoline).

Plumbing Work.—See "Electrical Work."

Power-houses.—John W. Maxey, 205 Binz Building, Houston, Texas, will open bids 16th inst. for construction of pile foundations, bulkheads, flumes, concrete or brick masonry work, and for two power-houses; forms of proposal, plans, etc., on view; \$500 check asked with bid.

Pumping Plant.—John W. Maxey, 204 Binz Building, Houston, Texas, will open bids January 16 for delivery and erection of rice irrigation power pumping plant about five miles from Houston; plant to lift 70,000 gallons of water per minute through two lifts of forty-two feet each; \$500 check will be required with bid; proposal forms, plans, etc., on view.

Railway Equipment.—See "Vehicle Materials."

Roofing.—G. W. Hood and N. L. Burgess, contractors, Gadsden, Ala., want prices on a quantity of (Old Dominion roofing) three-ply wood.

Sandpaper, Belting, etc.—Ready Doctor Medicine Co., Eufaula, Ala., wants names of firms who deal in sandpaper, sand belting and sand, also the glue preparation for making sand belting.

Saw-mill.—J. A. Neatherby, Glen Mary, Tenn., wants to buy 20 to 25-horse-power engine and boiler, saw-mill and planer.

Saw-mill Machinery.—See "Electric-light Plant, etc."

Spice Mills.—R. W. Carr, 621 Howard street, San Antonio, Texas, wants machinery for grinding the Mexican chile pepper.

Stave Machinery.—Curran & Lewis, Sweet Springs, W. Va., want addresses of manu-

facturers of barrel-stave machinery; also addresses of dealers in staves.

Steam Supplies.—See "Vehicle Materials."

Steel Beams.—McDonald Bros., Pleasant Hill, Mo., want 100 steel I beams, five inches and six inches, standard weight, cut to length of twelve feet eight inches.

Telephone Equipment.—W. J. Dunlap, Tallapoosa, Ga., wants prices on 50 or 100 'phones and supplies complete.

Textile Machinery.—W. J. Satterfield, 173 South Forsyth street, Atlanta, Ga., wants addresses of manufacturers of machines for making comforts or bed covers; also addresses of manufacturers of comforts and bed covers.

Tobacco Machinery.—Hopkinsville Tobacco Manufacturing Co., Hopkinsville, Ky., will need automatic machine for handling dipped filler, capacity about 2000 pounds per day; smoking tobacco granulator and cleaner, capacity 4000 pounds per day; smoking tobacco packer, capacity 500 pounds per day; 20-horse-power engine.

Vehicle Materials.—W. R. Stroup, Statesville, N. C., will need large quantity of horse-shoe and carriage materials.

Vehicle Materials.—S. Laub, 36 Classensgade, Copenhagen, Denmark, wants addresses of American manufacturers of wheels, wheel parts, etc., for carriages and other vehicles; also of wrought tubing, steel rails and steam valves.

Water-works.—See "Electric-light Plant, etc."

Water-works.—Geo. G. Shaw, mayor, Kaufman, Texas, will open bids January 20 for construction of water-works after plans and specifications now on view. Work to include earth dam and reservoir, pumping station and pumping machinery, furnishing and laying of about 7000 feet of eight-inch force main, and steel tower.

Well-boring.—Sam W. Wilkes, Fulton Club, Atlanta, Ga., wants estimates on boring an oil well from 1000 to 2000 feet deep; also wants to know best method of boring where there is a large amount of water to contend with.

Wire Springs.—W. J. Dunlap, Tallapoosa, Ga., wants prices on coil wire springs for hay presses.

Woodworking Machinery.—See "Stave Machinery."

Woodworking Machinery.—Jas. Davis, Glen Mary, Tenn., wants to buy new or second-hand pony saw-mill.

Woodworking Machinery.—Geo. H. Cooper, Louisville, N. C., wants to purchase coffin machinery (no power needed).

Woodworking Machinery.—Brunswick (Ga.) Sash & Door Co. is in the market for dowel machinery; also wants prices on diagonal planer and sander, new or second-hand.

Woodworking Machinery.—North Carolina Tray & Basket Co., Elizabeth City, N. C., wants bids on second-hand cut-off tables, head saws, basket bottom cutter, pulleys and belting, automatic grinder, drag saw, and bolter.

Woodworking Machinery.—North Carolina Tray & Basket Co., Elizabeth City, N. C., is in the market for second-hand planer fourteen inches, resaw, 50-inch automatic gulder, double edger, cut-off tables, post-boring machine for wood, drag saw, etc.

TRADE NOTES.

Quality Always Tells.—The work of the Nolley Illustrating Co. of Baltimore has been pronounced by experts to be of a very superior character, and the company well deserves the success which it has already achieved. It has been compelled to secure new quarters at 311 East Baltimore street in order to obtain the necessary facilities for its rapidly-increasing business. It is in a position to execute orders for anything in the advertising line from a show card to an elaborate catalogue.

An Enjoyable Occasion.—The annual banquets given by the H. Mueller Manufacturing Co. of Decatur, Ill., to employees are always occasions of unusual enjoyment, and the last one was no exception to the rule. The Decatur Herald in a lengthy article upon the affair referred to the remarkable prosperity of the company and its growth from a very small beginning into one of the most important plants in the West. No less than 275 people are now given employment in the manufacture of water and gas apparatus, plumbings' goods and other specialties for which this company is noted.

Crowded With Business.—Such appears to be the condition of the Vilter Manufacturing Co. of Milwaukee, Wis., judging by some of the orders which it has recently been fortunate in securing. They include fifteen refrig-

erating machines ranging from ten to 150 tons capacity for the Ruemmel Manufacturing Co. of St. Louis; a 50-ton ice plant and two refrigerating machines for the Chartiers Valley Brewing Co. of Carnegie, Pa.; a 40-ton ice plant and a 40-ton refrigerating plant for the Kansas Ice & Storage Co. of Salina, Kan.; a 320-ton refrigerating machine for the Hamm Brewing Co. of St. Paul, Minn.; a 135-ton ammonia condenser for the Pittsburg Brewing Co.; a 100-ton refrigerating machine for Goenner & Co. of Johnstown, Pa., and four refrigerating machines of 100 and 200 tons capacity for plants in New York. Other orders are for engines, piping and other apparatus from practically all parts of the country.

TRADE LITERATURE.

Durable and Economical.—Such are two of the features of the vehicles constructed by the Archer Iron Works of Chicago. The latest catalogue issued by this concern specifies some of the kinds of wheels, barrows, scrapers and carts which it supplies to the trade.

Plain and Neat.—The chief merit of the calendar published by the Standard Tool Co. of Cleveland, Ohio, is that it is of convenient size for shop use, and will probably be kept in a conspicuous position instead of being thrown away. It refers to the drills, chucks and other high-grade apparatus for which this company is noted.

A Handy Memorandum.—The Cypress Lumber Co. of Apalachicola, Fla., has recently published some advertising literature which contains valuable information. Especially might be mentioned its booklet entitled "What to Order," which gives practical information relative to the specifications required in various kinds of woodwork.

Covers Everything.—The claim made by the Trinidad Asphalt Manufacturing Co. of 32 Broadway, New York, that it covers everything is well sustained, for its products not only go over the top of things, but over the ground as well. Consequently, the representation of the gigantic umbrella contained on its calendar for 1902 is very appropriate.

Edison-Lalande.—This title is well known in connection with electric batteries for gas engines, fan motors, medical use and other purposes. They have the advantage of being economical and reliable. The Electrical Material Co., 221 North Calvert street, Baltimore, has recently published a pamphlet illustrating and describing the various types.

Nothing Small About It.—The calendar for 1902 sent to its patrons and friends by the Virginia Bridge & Iron Co. of Roanoke is no small affair. It is large enough for the figures to be seen at a distance of twenty or twenty-five feet, and for this reason will be appreciated in offices and counting-rooms. It is printed in patriotic colors, red and blue on white background.

Heaters.—Catalogue No. 135 issued by the American Blower Co. of Detroit has this significant word for the title. The hot-blast apparatus manufactured by the company referred to seems almost too well known to require description, but anyone needing additional information will find it given clearly and concisely, while the illustrations, which relate to the A. B. C. hot-blast heaters, are of a high order.

An Appropriate Announcement.—In wishing its friends and patrons the best wishes for the new year, the McMillan Bros. Co. of Mobile, Ala., has sent out a circular illustrating and describing its turpentine stills, which have an extensive reputation in the South. The company makes a specialty of heavy copper work, and has branches at Fayetteville, N. C.; Savannah, Ga., and Jacksonville, Fla.

A Work of Art.—The calendar issued by the Means & Fulton Iron Works of Birmingham, Ala., is really a work of art. It is illustrated with a reproduction of a painting by Mr. W. T. Spence representing an Indian girl. The coloring is of a high order of excellence, and the title, "The Nation's Ward," is very appropriate. The publishers are to be congratulated upon having selected such an artistic and appropriate illustration.

A Second Edition.—Such has been the demand for information relative to the Singer automatic ice machine that the company has been compelled to publish a second edition of its catalogue describing the small machines. They are especially desirable for hotels, apartment-houses, hospitals, where refrigeration is needed equal to that produced by twenty-five tons of ice or less daily. The Singer apparatus has been highly recommended by experts. The Singer Auto-

matic Ice Machine Co. will be pleased to send the catalogue if addressed at Bridgeport, Conn.

Industrial Railways.—A catalogue relative to industrial railways recently issued by the Hoshor-Platt Company of No. 15 Cortlandt street, New York, is of more than ordinary interest. The publication referred to describes the various forms of railways suitable for factory yards and buildings, as well as the rolling stock which can be employed. The company supplies all of the material from the turntable to the locomotive, and manufacturers contemplating a transportation system would do well to write for the catalogue before deciding.

Perfect Power Transmission.—This is a problem upon which engineers have labored for many years, and the result is the introduction of a variety of gears. The Renold silent chain gear introduced by the Link-Belt Engineering Co. of Nicetown, Philadelphia, has attracted much favorable comment on account of its superior performance in connection with electrical and steam machinery, as well as general machine-shop practice. A pamphlet recently issued by the Link-Belt Company clearly illustrates and describes its combination of advantages.

Conveying Machinery.—The transfer of finished product and raw material is a problem which is always interesting, as its expense may make such a difference in the profits of a business. The belt-conveying machinery manufactured by the Robins Conveying Belt Co., Park Row Building, New York, is noted not only for its simplicity and economy in operation, but for the extensive variety of uses to which it can be put. A catalogue recently published by the company gives an excellent idea of its service, as it is profusely illustrated with unusually interesting engravings showing the Robins conveyors in use in mining operations, in connection with manufacturing of various kinds, dredging, stamp mills, gas works and in the transfer of coal, coke, sand, refuse and other material. The catalogue is one of the most attractive which has yet been published by this concern, and will be of special interest to engineers and others who realize the value of such apparatus.

Business Conveniences.—Such extensive improvements have been made in recent years in the designing of office furniture that the business man has no excuse for not providing himself with an outfit which is both convenient and comfortable. It is no longer necessary to be perched on a stool to do business, and the merchant, banker or manufacturer can have a desk so arranged that everything he needs is within reach of his fingers, and there is no necessity for rising from his chair. A catalogue recently issued by Messrs. M. L. Himmel & Son, 711-715 East Baltimore street, Baltimore, suggests these thoughts, for it may be said that Messrs. Himmel & Son are among the most extensive manufacturers of office furniture in the United States. They supply desks and counting-room outfits complete, and design office furniture to order when desired. The catalogue gives an excellent idea of the variety of chairs, tables, desks, wardrobes, etc., which are turned out by this concern. It will be sent to any address on application as above.

Long List of Prizes.—One of the most important exhibits at the Pan-American Exposition was that of the Niles-Bement-Pond Company, 136-138 Liberty street, New York, which represents some of the largest manufacturers of power machinery in the world. As a result of the display of this corporation, prizes were awarded as follows: Gold medal to Bement, Miles & Co. for a double-stand hammer, and silver medal for vertical milling machine; gold medal to the Pond Machine Tool Co. for planer, and bronze medal for forge lathe; gold medal to the Niles Tool Works Co. for boring mill, and silver medal for radial drill. The Pratt & Whitney Company secured gold medals for its measuring machine, profiling machinery, power miller, shaper and its collection of small tools, bronze medals for its chucking machine and centering machine, silver medal for its 1900 lathe, and two silver medals for its automatic screw machines. As already stated, these plants are represented by the Niles-Bement-Pond Company, which can take a pardonable pride for the remarkable extent of the awards. Incidentally it may be said that the companies referred to have recently issued considerable interesting literature relative to drills, turning mills, planers and other power tools. Special mention may be made of catalogues describing the machinery and small tools manufactured by the Pratt & Whitney Company. Each is admirably illustrated, and, as is usual with this company, contains just the information desired by machinists.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

BALTIMORE'S SAVINGS BANKS.

Thrift and Prosperity of the City Reflected by Their Condition.

The condition of the savings institutions in a community is an excellent indication of its prosperity, as well as the habits of its people. The savings banks of Baltimore reflect the prosperity of the city to a remarkable extent, and have afforded an opportunity to encourage thrift. While conducted from purely business motives, the benefit of such institutions is so apparent that it need only be referred to. The soundness of the savings banks in this city has done much to contribute to its reputation as one of the wealthiest communities in the United States; consequently the annual reports of the various institutions are of unusual interest, as they indicate any financial changes for better or worse.

The statements of the principal savings banks, detailed in another column, emphasize the fact that the year 1901 has been very prosperous, for every institution not only exhibits an increase in its receipts, but an increase in the number of its depositors. A very gratifying feature is the reports of the various examining committees, all of whom are of the opinion that the investments of the several banks have been carefully and conservatively made in mortgages, bonds and other securities of the most approved character. This indicates that the various corporations are ably and judiciously managed. It might be stated that the books of each bank have been investigated by a committee of prominent citizens not interested in its affairs. The Provident Savings Bank has had its accounts examined by the well-known firm of Lybrand, Ross Bros. & Montgomery of Philadelphia, public accountants and auditors, who have verified all of the statistics reported.

Some figures taken from the various reports, which are published in full elsewhere, are of unusual interest. The Metropolitan Savings Bank shows that over 5000 accounts are open at present, a gain of nearly 20 per cent. during the past year. Its dividends from investments and interest on loans amounted to \$183,000. The Central Savings Bank opened 2410 accounts during the year, and had funds on hand December 31 amounting to \$6,912,000. The German Savings Bank at present has nearly 6000 patrons. The Savings Bank of Baltimore, which is one of the largest in the United States, continues to progress, as is indicated by the fact that it has over 50,000 open accounts at present, 6734 new accounts being opened during the year. The amount of funds on deposit December 31 was no less than \$23,602,000. The enterprise of the Provident Savings Bank, which has branches located in convenient portions of the city and suburbs, is evidently appreciated, as it now has over 28,000 open accounts, an increase of more than 2000 within the year.

Altogether, the several reports of the institutions are well worth studying, as each represents not only a successful business enterprise, but indicates the general tendency of the people towards economy and thrift, as already stated.

New Banks in the South.

Statistics relative to the number of banks organized in the United States in 1901 make a very favorable showing in

the South. According to the table, banks began business in the Southern States as follows:

	National banks.	Other banks.
Alabama.....	8	19
Arkansas.....	4	26
Florida.....	3	6
Georgia.....	10	39
Kentucky.....	7	34
Louisiana.....	7	22
Maryland.....	8	1
Mississippi.....	4	21
North Carolina.....	5	24
South Carolina.....	1	17
Tennessee.....	6	19
Texas.....	94	34
Virginia.....	10	19
West Virginia.....	7	16

It might be added that no less than thirty-six national and ninety-five State banks were organized in Oklahoma Territory, and twenty-six national and forty State banks in Indian Territory, which will give an idea of the rapid expansion of business in this section. Texas heads the record in the United States in the organization of national banks, having nineteen more to its credit than Pennsylvania, which represented the next largest number. The remarkably large number of national banks chartered shows the effect of the legislation allowing institutions of this class to be organized with a capital stock of \$25,000 and over.

New Corporations.

Messrs. Geo. L. Barnes & Co. have opened a banking-house at Girdletree, Md.

W. H. Hearne is reported as interested in a bank to be opened at West Liberty, W. Va.

The Citizens' Bank & Trust Co. has been incorporated at Coalgate, I. T., by Boone Williams and others.

The Bank of Licking has been organized at Licking, Mo., capitalized at \$10,000, by J. A. Craven and others.

Boone Williams and others have formed the Citizens' Banking & Trust Co. to do business at Coalgate, I. T.

J. F. Holden and H. H. Meyers are interested in the Mercantile Trust Co., recently organized at Little Rock, Ark.

The business men of Knoxville, Tenn., are considering the organization of another fire insurance company in that city.

Judson T. Cull and others have formed the Home Title & Insurance Co. at Washington. It is to be capitalized at \$100,000.

The Rozier Investment Co., organized at St. Louis, Mo., with \$200,000 capital stock, includes H. L. and W. H. Rozier.

Z. W. Ewing is president, and N. A. Crockett, cashier, of the national bank organized at Pulaski, Tenn., with \$50,000 capital stock.

The Finance Company of America has been organized at Knoxville, Tenn., with \$100,000 capital stock, by William T. Lang and others.

C. L. Fist of Muskogee, I. T., is interested in the Fist-Meagher-Marshall Loan & Real Estate Co., recently organized with \$5000 capital stock.

R. P. Brooks of Forsythe and J. C. Wright of Roanoke, Ga., are interested in a bank recently organized at Roanoke with \$50,000 capital stock.

O. P. Amacker has been elected president, and W. C. Kent, vice-president, of the bank recently organized at Kentwood, La., with \$25,000 capital stock.

The Bank of Warren, Ark., recently incorporated, will be capitalized at \$25,000. W. T. Thompson has been elected president, and H. G. Martin, cashier.

The Bank of Hollandale, recently organized at Hollandale, Miss., is capitalized at \$50,000. Among those interested are C. W. King and R. W. Millsaps.

H. F. Goodnight is president, and E. C. Lewis, cashier, of the Van Zandt County National Bank, which has been organized to do business at Wills Point, Texas.

The application of James F. Craig and others to organize a national bank at Haileyville, I. T., with \$25,000 capital

stock has been approved by the government.

The Bank of St. Genevieve is the title of the new institution at St. Genevieve, Mo., incorporated with \$10,000 capital stock by Robert A. Smith and others.

R. H. Hardaway has been elected president, and N. L. North, cashier, of the Coweta National Bank, recently organized at Newnan, Ga., with \$50,000 capital stock.

C. H. Simmons has been elected president, and J. W. Gilliam, treasurer, of the Savings, Deposit & Trust Co., organized at Hillsboro, Texas, with \$50,000 capital stock.

Arrangements have been made to organize the Gadsden National Bank at Gadsden, Ala., with \$50,000 capital stock. Among those interested is George D. Lancaster.

W. T. Thompson has been elected president; S. B. Meeks, vice-president, and H. B. Martin, cashier, of the bank recently organized at Warren, Ark., with \$25,000 capital stock.

Another trust company has been organized at St. Louis under the title of the American Central Trust Co., with \$1,000,000 capital stock, by William S. Simpson and others.

W. R. Thompson of Fort Worth, Texas, has been elected president of the Alvord National Bank, which has been organized to begin business at Alvord, Texas, with \$25,000 capital stock.

Authority has been given the First National Bank at Blum, Texas, to begin business with \$25,000 capital stock. D. E. Waggoner has been elected president, and W. A. Wells, cashier.

A commission has been issued to the Southern Life & Savings Insurance Co. of Greenville, S. C., to begin business with \$500,000 capital stock. B. A. Morgan of Greenville is one of the directors.

New Securities.

The Parksley Bank at Onancock, Va., has decided to increase its capital stock from \$25,000 to \$60,000.

The Atlanta Ice Co. has given a mortgage to secure an issue of \$25,000 in bonds for various purposes.

The Merchants' Bank of Nashville, Tenn., has decided to increase its capital stock from \$100,000 to \$200,000.

The city of Palatka, Fla., will probably issue \$75,000 in 5 per cent. improvement bonds. The mayor will give further particulars.

The issue of \$130,000 in bonds of Greensboro, N. C., remains unsold, and will probably be again offered investors in the near future.

The Citizens' Bank of Mountain City, Tenn., has increased its capital stock from \$20,000 to \$50,000 and changed its title to the Merchants and Traders' Bank.

The St. Charles Street Railway Co. of New Orleans has given a mortgage of \$600,000 to John McCloskey to secure a bond issue of this amount, bearing interest at 4 per cent. The issue is a portion of the financial plan to complete the extensions now being constructed by the company.

Financial Notes.

The First National Bank at Austin, Texas, has reopened for business, with John H. Kirby as president.

It is announced that R. Waverly Smith of Galveston has secured a controlling interest in the First National Bank of that city, paying \$150,000 for 1501 shares of its stock.

The Lewis Banking Co. has made arrangements to begin business at Montezuma, Ga., under a State charter. E. B. Lewis is a member of the company, which is capitalized at \$100,000.

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The Traders and Truckers' Bank, recently organized at Norfolk, Va., will have a savings department as well. Its authorized capital is \$50,000. E. Black is president, and T. P. Gray, cashier.

The Blue Ridge Bank of Blue Ridge, Ga., has secured a charter to do business under the title of the North Georgia National Bank, capitalized at \$50,000. J. H. Carter is president, and J. Davis, cashier.

The banking firm of Messrs. Levering, Edgar & Co. has been organized to succeed the firm of Baker, Edgar & Co. of Baltimore, and has secured offices at 302 Water street. The firm will do a general banking and brokerage business at the address referred to.

Messrs. Spencer Trask & Co. of New York offer a desirable line of securities for investment, which are detailed elsewhere. They include a number of high-class railroad bonds, which can be purchased on a basis to realize 4 per cent. and over. The number of Southern securities included is very noticeable.

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Gen. Con. & 1st Mtg. 5s, M. & N., 1937.
Chicago Great Western Railway Co.,
4 per cent. Debenture Stock, J. & J. 15th.
Colorado Springs Electric Co.,
1st Mtg. 5s, A. & O., 1929.
Denver & Rio Grande Railroad Co.,
Imp. Mtg. 5s, J. & D., 1928.
Edison Elec. Illum'g Co. of Brooklyn,
1st Con. (now first) 4s, J. & J., 1939.
Louisville & Nashville Railroad Co.,
1st Mtg. Col. Tr. 5s, M. & N., 1931.
Louisville New Albany & Chi. RR. Co.,
C. & I. Div. 1st Mtg. 5s, F. & A., 1911.
Metropolitan Street Railway Co.,
Gen. Mtg. & Col. Tr. 5s, F. & A., 1927.
Missouri Pacific Railway Co.,
Col. Tr. 5s, M. & N., 1917.
Mobile & Ohio Railroad Co.,
Mortg. Div. 1st Mtg. 5s, F. & A., 1917.
N. Y. Gas & Elec. Lt., Heat & Pow. Co.,
Purchase Money 4s, F. & A., 1949.
Rio Grande Western Railway Co.,
1st Con. Mtg. 4s, A. & O., 1919.
Southern Railway Company,
Rich. & Dan. Deb. (now 2d Mtg.) 5s, A. & O., 1927.
Southern Railway Company,
Va. Mid. Gen. Mtg. 5s, M. & N., 1936.
Third Avenue Railroad Company,
1st Con. Mtg. 4s, J. & J., 2000.

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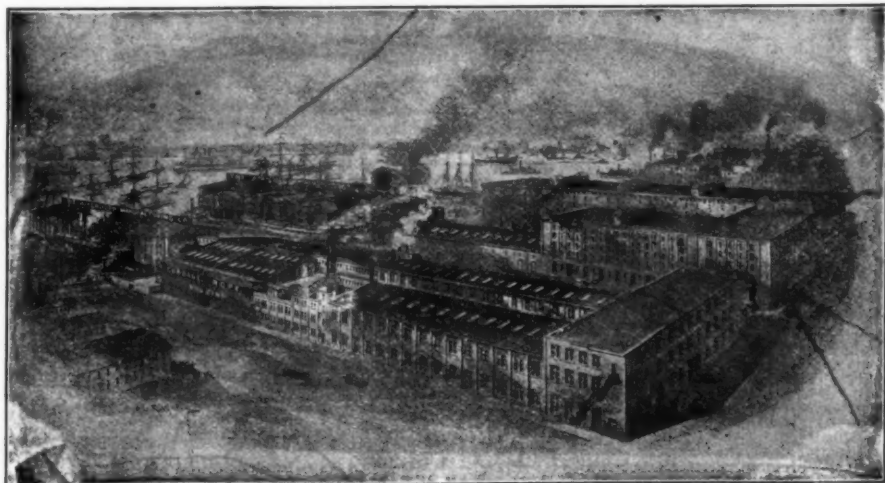
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BANK STATEMENTS.

THE SAVINGS BANK OF BALTIMORE.

JANUARY 1, 1902.

The undersigned, appointed by the Board of Directors of the Savings Bank of Baltimore to audit its statement for the past year and to report thereon, have carefully performed the duty assigned them and report as follows:

Amount of funds 31st December, 1901.....\$22,949,067 06
Received from depositors during 1901.....4,248,244 31
Dividends on stocks, interest on loans, etc.....1,124,906 94
\$28,322,218 31

From which deduct as follows:

Amount paid depositors during 1901, including principal and interest.....\$4,074,013 06
Amount paid for premium and accrued interest on stocks and bonds purchased, etc. 541,583 85
Amount paid, expenses 46,787 24
Amount paid, taxes.... 58,166 56
4,720,550 70

Leaving amount of funds 31st December, 1901.....\$23,601,667 61

The funds are invested in Loans on Real Estate and collateral security, in the opinion of the undersigned abundantly secured, and in the purchase of Bonds and Stocks of the most substantial character.

There were open on 1st January, 1901, 48,813 Accounts.
There were opened during the year 6734 Accounts.
And closed during the same period 5211 Accounts.
Leaving open the 31st December, 1901, 50,336 Accounts.

CLAYTON C. HALL,
CHAS. A. WEBB,
J. J. NELIGAN.

CENTRAL SAVINGS BANK OF BALTIMORE.

INCORPORATED 1854.
S. E. CORNER CHARLES AND LEXINGTON STS.
ANNUAL STATEMENT.
BALTIMORE, December 31, 1901.
Funds on hand December 31, 1900, \$6,589,376 49
Received from depositors during 1901.....2,577,702 38
Received interest on loans, bonds, etc., during 1901.....297,063 52
\$9,464,742 39

Paid depositors during 1901.....\$2,476,503 12
Paid taxes during 1901.....20,644 73
Paid expenses during 1901.....22,794 22
Paid premiums on bonds bought during 1901.....32,761 53
2,552,703 60

Funds on hand December 31, 1901, \$6,912,038 79

Accounts open December 31, 1900.....17,904
Accounts opened during 1901.....2,410
Accounts closed during 1901.....1,900
Accounts open December 31, 1901.....18,405
We find, upon examination, that the investments of the Central Savings Bank have been carefully made in stocks and bonds of the most substantial character; that its loans are well secured, and that it is economically and judiciously managed.

Baltimore, Md., January 1, 1902.
JOHN D. HOWARD,
MICHAEL AMBACH,
JAMES LOND.

GERMAN SAVINGS BANK OF BALTIMORE.

SOUTHWEST CORNER OF BALTIMORE AND EUTAW STS.
BALTIMORE, January 1, 1902.
At the request of the Directors of the German Savings Bank of Baltimore City the undersigned have carefully examined the operations of the Bank for the past year and report as follows:

Amount of funds December 31, 1900.....\$2,597,828 74
Received from depositors during the year.....1,314,662 51
Received interest and dividends.....131,636 85
\$4,044,128 10
Paid depositors during the year.....\$1,117,472 77
Paid expenses and salaries.....15,411 81
Paid State and city taxes.....7,453 50
Deducted from premium account.....21,456 43
1,161,794 51
Leaving net amount funds December 31, 1901.....\$2,882,333 59

The funds of the Bank are invested in Stocks and Bonds of standard value and in Loans secured by Real Estate, Stocks and Bonds, and in the opinion of the undersigned the Loans are well secured and the Bank is economically and judiciously managed.
Accounts open December 31, 1900.....5,236
Accounts opened during the year.....1,401
Accounts closed during the year.....796
Accounts open December 31, 1901.....5,841
GUSTAVUS A. DOBLER,
J. H. SCHNEPPE,
HARRY M. BENZINGER.

METROPOLITAN SAVINGS BANK OF BALTIMORE.

C. C. SHRIVER, President.
JAMES J. RYAN, Treasurer.
BALTIMORE, December 1, 1901.

The undersigned, a committee of examination appointed by the Managers of the Metropolitan Savings Bank of Baltimore to investigate the affairs of said corporation and to make and publish a report of such investigation, respectfully submit the following:

Amount of funds on hand December 1, 1900.....\$3,090,150 29
Received from depositors during past year.....1,889,296 36
Received dividends from stocks and bonds and interest from loans.....182,668 62
Total.....\$5,162,124 27

From which deduct as follows:

Amount paid depositors during past year.....\$1,870,510 71
State and city taxes and expenses.....29,258 76
Premiums on stocks and bonds.....26,256 47
1,926,025 94

Leaving funds December 1, 1901, \$3,236,098 33

The funds are invested in Loans on Real Estate, Stocks and Bonds, in the opinion of the undersigned abundantly secured, and in the purchase of Stocks and Bonds of the most substantial character. The Stocks and Bonds purchased are all held below their market value, and none above their par value.

There were open December 1, 1900, 4856 Accounts; there were opened during past year 858 Accounts, and closed during same period 707 Accounts, leaving open December 1, 1901, 5007 Accounts.

MICHAEL JENKINS,
DANIEL DONNELLY,
V. J. BROWN,
HENRY CLARK,
CUMBERLAND DUGAN.

In accordance with Article IV of the By-Laws, the investments have been examined by the undersigned, a committee in nowise connected with the management of the corporation, who thus characterize them:

"In our opinion the investments have been carefully made, and the valuations of the assets are conservative. We consider the condition of the bank to be sound and prosperous."

Committee of Directors. BLANCHARD RANDALL,
FRANCIS WHITE,
LAWRENCE R. KEMP.

PROVIDENT SAVINGS BANK OF BALTIMORE.

(Incorporated 1886.)
STATEMENT JANUARY 3, 1902.

Funds on hand December 31, 1900, \$1,569,732 70
Received from depositors during 1901.....\$1,342,921 26
Received from interest on investments.....75,411 90
1,418,233 25
\$2,988,115 96

Paid to depositors during 1901.....\$1,084,681 26
Paid for expenses during 1901.....29,031 80
Paid State and city taxes, 1901.....4,348 51
Paid for premium on bonds bought.....1,660 33
1,110,721 90

Funds on hand December 31, 1901, \$1,877,394 05

Accounts open December 31, 1900.....25,145
Accounts opened during 1901.....7,453
Accounts closed during 1901.....5,421
Accounts open December 31, 1901.....28,177

The undersigned, appointed by the Board of Directors of the Provident Savings Bank of Baltimore to audit a statement of its operations for the past year, find upon examination that the above statement of funds on hand is correct, and that the investments of the Bank in bonds and mortgages appear to have been well and judiciously made, none of the bonds owned being carried upon the books above par, and that the Bank is carefully and economically conducted.

MICHAEL JENKINS,
MILES WHITE, JR.,
GUSTAVUS A. DOBLER.

In addition to the above examination of the securities of the Bank, the Directors have had the accounts carefully audited by a firm of public accountants, whose certificate is

appended. The committee of the Board who examined the assets, as referred to, were Messrs. Lawason Riggs, James Bond and James H. Smith.

LYBRAND, ROSS BROS. & MONTGOMERY.

Public Accountants and Auditors,
Philadelphia, December 31, 1901.

We hereby certify that we have audited the accounts of the Provident Savings Bank for the first eight months of its current fiscal year, to wit, April 1 to November 30, 1901, and found the same to be correct.

Balance-sheet as of November 30, 1901, was submitted by us, and the securities representing the loans and investments stated thereon were inspected by a committee of the Board of Directors and certified to as being correct and in agreement therewith. We counted the cash on hand and verified the balances on deposit in other banks and trust companies on said date; prepared trial balance of depositors' accounts as of said date, having previously made verification of their postings; examined all vouchers for charges to Expense Account during the period, and saw that all items of Income were accounted for.

We found the system of accounting in use to be well adapted to the purpose and most intelligently carried out.

LYBRAND, ROSS BROS. & MONTGOMERY,
Public Accountants and Auditors.

The Maltby-Hornaday Company

BANKERS
AND
BROKERS.

Traction Stocks and Bonds.

Corporations Organized.

Southern Timber and Coal and
Industrial Properties Incorporated,
Financed, Bought and Sold.

MUNICIPAL BONDS.

Union Trust Bldg., CINCINNATI.

MOTTU, DEWITT & CO.

Southern Investments,
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Correspondence Invited.

Incorporate Under the Laws of West Virginia.

NO LIMIT ON THE CAPITAL.
Liable only for the amount subscribed. Can organize at once. License and fees lower than any other State. Full information as to how given on application to the undersigned.

EDWARD CORDER, SPRINGER, W. VA.,
ATTORNEY AT LAW.
Formerly Chief Clerk to State

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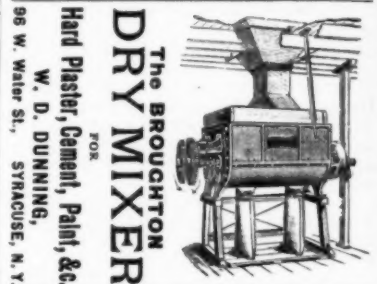


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NEW YORK. COTTON YARNS, PHILA. CHICAGO.

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ALPHABETICAL INDEX OF ADVERTISERS.

For CLASSIFIED INDEX See
Pages 3, 5, 7, 9, 11, 13, 15
and 17.

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Send for prospectus.
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40,000 Acres Round Pine Timber Lands.

Near S. A. L. Railway and Plant System, in Lake County, Fla. Easy terms.

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COAL and TIMBER LAND,
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JOHN J. WESTCOTT, Manager.

West Virginia Coal Mine.

374 ACRES

of Coal Land in West Virginia. Mines fully equipped and in operation. Owners engaged in other business, reason for selling.

PRICE, \$35,000 CASH.

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LESSORS OF

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INDUSTRIAL ENTERPRISES

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THIS INCLUDES BUILDING SITE.

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Factory Sites with Cheap Electric Power. Also Direct Water Power.

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THOS. F. HANLON, Corporation Lawyer,
900 F St. S. W., Atlantic Bldg., Washington, D. C. If you want to convert your business into a stock company, or want industrial plants of any kind to locate in your town, a charter and company organized, capital, officers, directors and practical men, consult me.

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The region is contiguous to the cotton field and is within the wool-bearing belt. It is besides timbered with such trees as are suitable for the manufacture of wood fibre.

The water powers are superb, coal for fuel convenient and low in price, labor is 25% cheaper than in the North and finished products may be transported to all markets domestic and foreign at rates as favorable as those accorded to other manufacturing districts in the United States.

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RICHMOND, VA.

Small Rolling Mill

For Sale Cheap.

Opportunity to get into the iron business on easy terms at the right time. Mill is located on main line of Railroad, favorably situated for export.

Supply of raw material assured. Will sell for cash or take part payment in Stock in a Company.

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Cedartown, Ga., IS A

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EXCEPTIONAL OPPORTUNITY.

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Correspondence Solicited, Address

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has advantages as a manufacturing point that cannot fail to interest you, if you contemplate the establishment of a new plant or the removal of your present one. **CHEAP FUEL** (Coal or Gas); **LOW TAXES**; **LOW-PRICED SITES** and **UNSURPASSED SHIPPING FACILITIES** are the attractive features. Has the idea ever struck you that the United States Steel Corporation should know the peculiar advantages of all sections of this country? They are expending more money to enlarge their plants located in the **WHEELING DISTRICT** than on all others combined. What does this signify?

The **INDEPENDENT** people have tumbled to it. Full details will be furnished upon application to the Secretary.

Wheeling Board of Trade, Wheeling, W. Va.

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ALEXANDER CITY is well located, high, healthy, pure water, good market, excellent churches and free schools.

Before deciding to locate write us. We can interest you.

Write for information to

BENJ. RUSSELL, Treasurer,

Industrial and Development Association,

Alexander City, Alabama.

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WANTED

At a number of points in the South along
the line of the

Southern Railway.

There are good openings for Woodworking Plants, such as **FURNITURE FACTORIES, PLANING MILLS, SPOKE AND HANDLE FACTORIES**, or other plants using pine or hardwoods. Local people will invest from \$6,000 to \$8,000 with an experienced man who will himself invest a like amount or more and do a legitimate business. For information write to

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Advertise in the Manufacturers' Record.

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Camphor and Celluloid Crystal Refiners,
and Manufacturing Chemists.

Incorporated under the Laws of the State of Delaware.

Capital \$500,000

Divided into 50,000 6 per cent. Preference Shares of \$5.00 each and 50,000 Ordinary Shares of \$5.00 each, payable \$2.00 on Application, \$1.00 on Allotment, and \$2.00 three months after Allotment.

Issue of 27,000 6 per cent. Preference and 27,000 Ordinary Shares of \$5.00 each, at Par.

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M. TEMPLE TAYLOR, Savannah, Ga.

GARDNER W. KIMBALL, of Delaware Trust Co., Wilmington, Del.

C. G. MURRAY, Blackshear, Ga., Resident Director for the Globe Mfg. Co., Ltd.

SOLICITORS:

ESTES & WALKER, Blackshear, Ga.

AUDITOR:

EDMUND WILLCOX, Chartered Accountant,
London and New York.

Boston Office, 42 Court Street, Boston, Mass.

ASSISTANT CHEMIST:

J. S. GRAY, Blackshear, Ga.

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C. G. MURRAY, Secretary, BLACKSHEAR, GA.

Registered Office: 902 Market St., WILMINGTON, DEL.

ABRIDGED PROSPECTUS.

This Company has been formed to adopt and carry out an agreement between Archibald Meldrum, Manufacturing Chemist, Blackshear, Ga., U. S. A. (late with the Blackshear Manufacturing Company, Blackshear, Ga.), and the Globe Manufacturing Company, Limited, Camphor Refiners and Manufacturing Chemists, 11 Mansion House Chambers, London, England, and whose works are situated at West Norwood, England, Hoboken, Antwerp, France, the said agreement being dated 2d day of September, 1901.

The agreement comprises the sole rights of United States and Canada to manufacture Camphor, Celluloid Crystals and by-products under the Globe Manufacturing Company's various processes.

The processes being secret, it is not desirable in the interests of the Company to give any details, but the secret documents have been duly sealed and deposited with the Company's solicitors as per agreement with Mr. Meldrum.

A working capital of \$50,000 is ample for the manufacturing of 50 tons of Camphor, Celluloid Crystals and by-products per month, and for which a market has already been acquired. The gross profit on this production is estimated to give, after bearing all charges, a sum not less than \$120,000 for distribution on the Preference and Ordinary shares, leaving a sum of \$70,000 for the purpose of reserve fund, or for further extension of the business.

The Company also acquires 250 acres of land, a dwelling-house and an abundance of fine timber. The purchase price for the land is \$6200; for the rights to manufacture, under the various processes, \$282,000, leaving a balance of \$211,800. The total cost for building works and installing plant and machinery capable of producing 3 tons per day is \$61,800, leaving the working capital at \$50,000, and \$100,000 for future issue.

The only agreements existing are: 1st. Between the Company and Archibald Meldrum, wherein he sells to the Company the American rights for manufacturing at \$282,000, and 250 acres of land, including dwelling-house and timber, at \$6200; total \$288,200, payable as to \$158,200 in cash and \$130,000 in Ordinary shares.

2d. Agreement between the Company and Archibald Meldrum, wherein the latter agrees to act as Managing Director for 10 years at a salary of \$5000 per annum.

3d. Agreement between Archibald Meldrum and the Industrial Trust Company, 60-62 Liberty street, New York, as to the guaranteeing of this issue.

Mr. Meldrum will be a large stockholder, having agreed to accept a large portion of the purchase price in Ordinary stock, thus showing the business will be conducted upon safe lines. Mr. Meldrum is a thorough, practical manufacturing chemist, understanding the practical manufacture of Camphor, its by-product, Borax, Boracic Acid, Sulphuric Acid, Arsenic, Starch and many other chemicals too numerous to mention. Any improvements that Mr. Meldrum may bring out as regards reducing cost of manufacture, or new processes, become the property of the Company. This Company will consider the manufacture of various chemicals, and more especially Arsenic, and for which there is a growing demand. A convention was held at Brunswick, Ga., on April 9, 1901, to consider the cultivation of the plant known as "Cassava." Starch can be manufactured at a low cost from this plant, and should it be planted to any great extent in this State, starch manufacturing will also be considered. It is estimated the Company will be in a position to fill orders early next year. Already arrangements have been and are being made for the sale of the total output of the Company's products.

The advantages of manufacturing at Blackshear are many. Firstly, the air is pure; secondly, the water is good and free; thirdly, labor is cheap; fourthly, transportation is easy, as the railroad would run into the works; fifthly, it is handy for New York and other markets, also for shipping. The imports of Camphor for year 1899 amounted to 1,807,541 pounds, valued at \$322,100, and in 1900 1,789,590 pounds, valued at \$485,071. It will be seen there is a good outlook for this Company.

No promotion money is being paid, and Mr. Meldrum pays all expenses up to allotment. Prospectuses and application forms may be had of the

NATIONAL PROMOTING & AUDITING CO., Fiscal Agents, 42 Court St., Boston, Mass.

Bargains in Machinery

FOR IMMEDIATE DELIVERY.

Ten 150 H.P. Boilers

LOCOMOTIVE TYPE.

Built of the best materials and in the best manner. Good for 100 lbs. working pressure. Tubes 3" diam. x 16 ft. long. Fire-boxes 7 ft. x 5 ft.

PRICES LOW.

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NEW AND SECOND-HAND Machine Tools.

Lathes.

96" swing, 56"x12", 44"x24", 30"x22", 24"x17", 22"x12", 22"x7", 21"x10", 20"x8", 19"x8", 18"x6", 17"x6", 16"x8", 14"x6", 15"x6".

Drill Presses.

60", 44", 36", 23", 20". One 10-spindle Turret Drill. One 15 1/2" Post Drill.

Planer.

24"x6" New Haven.

Shapers.

18" new and one 16".

Pipe and Bolt Cutters.

4", 2" and one 1 1/2".

Hammers.

Radial Arm Steam, 350 and 225 lbs. 80-lb. Trip. 16"x9" Boyer Pneumatic.

Wood-working Machinery.

24" Sin. Surfer, Planer and Matcher. 12" Jointer. Self-feed two-sided Panel Raiser. Jig Saws Single Saw. 18"x16" Wood Lathe. 12"x5" Wood Lathe.

Engines, Boilers, Hoists, Locomotives, Steam Shovels, Rock Drills, etc., etc.

CARLIN MACHINERY & SUPPLY CO.

Lacock and Sandusky Sts.

ALLEGHENY, PA.

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- 1 18x48 Greene.
- 1 18x42 Lane & Bodley.
- 1 16 1/2"x24 Buckeye.
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- 1 26"x24"x6" New Haven planer.
- 1 24"x24"x5" Powell planer.
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Rope Transmission Rig

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100 h. p. 12x24 Buckeye Automatic.
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100 H. P. National Water Tube Boilers. 5 66"x18"
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Two Davis & Furber Machine Co.'s
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Stationary Boilers—1 60"x19", 20" flues;
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DYNA/105—Brand new, modern, best make,
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Belting, as good as new.

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General Electric, Inductor Motors

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154. Two 50 H. P. Otto gas and gasoline engines.

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hoisting engine.

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hoisting engine.

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688. 66x18 tubular.

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009. 50 vertical, from 2 to 20 H. P.

010. 20 locomotive fire box boilers, from 10 to 40

H. P.

022. 125 H. P. locomotive fire box boiler.

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337. 1 straight line steam driven air compressor,

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896. Hall duplex air compressors, steam driven

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One new 20"x24" Cylinder for Corliss Engine.

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LOCOMOTIVES, standard and narrow gauge.
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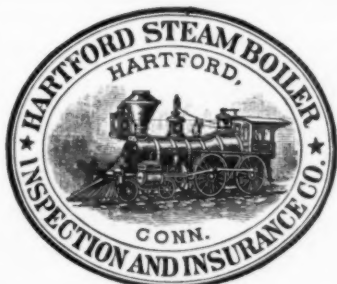
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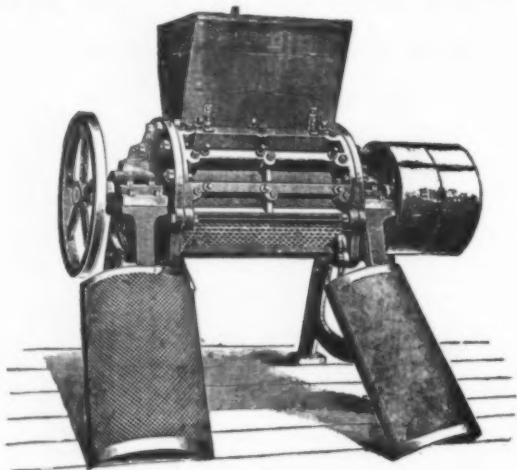
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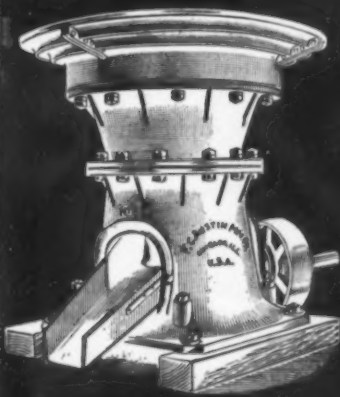
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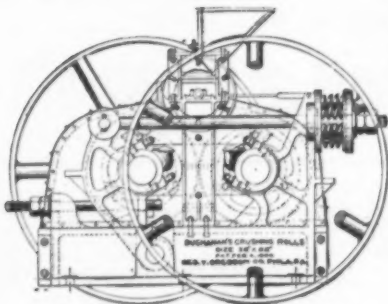
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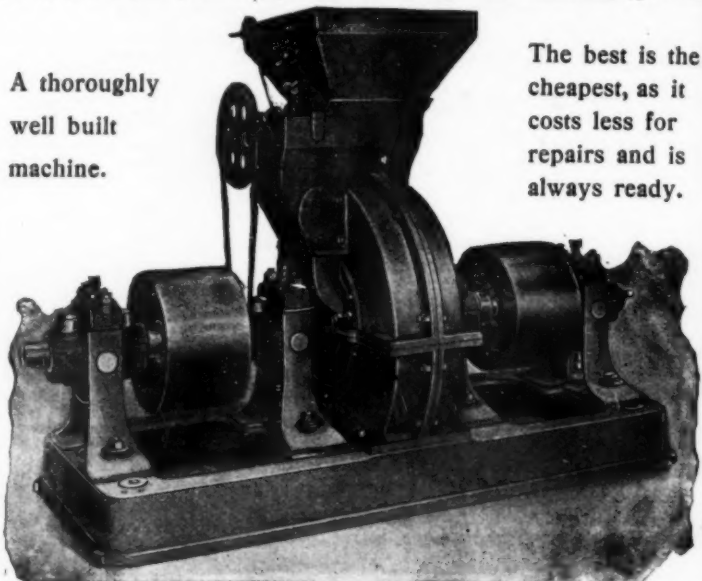
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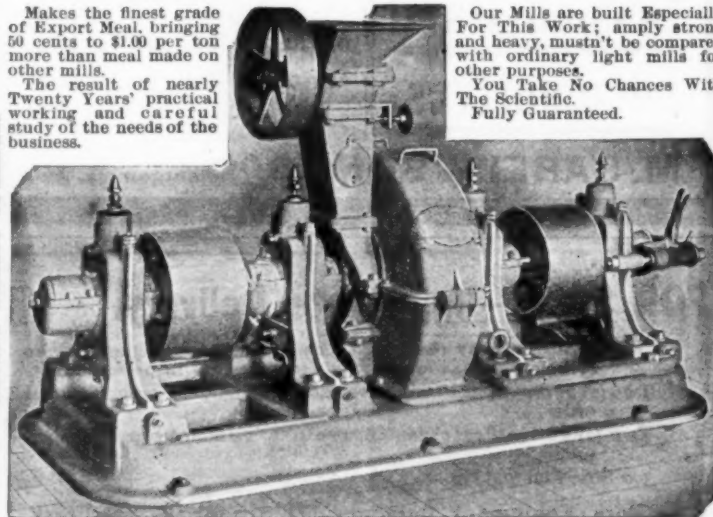
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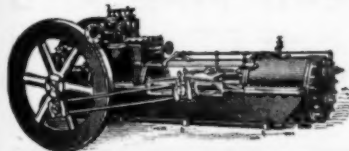
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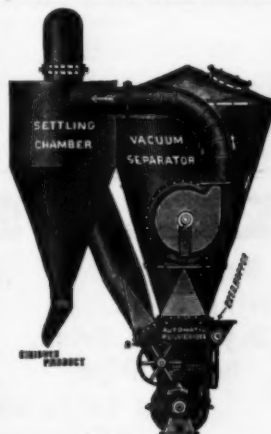
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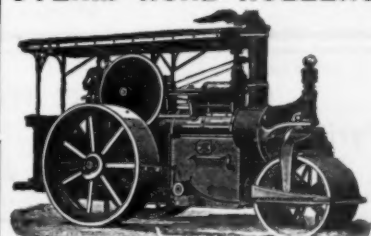
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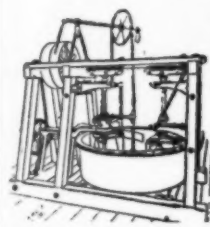
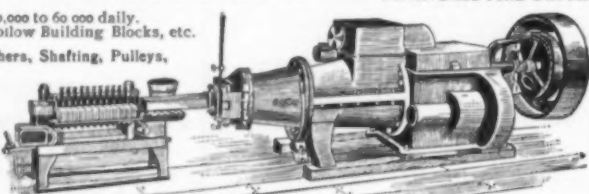
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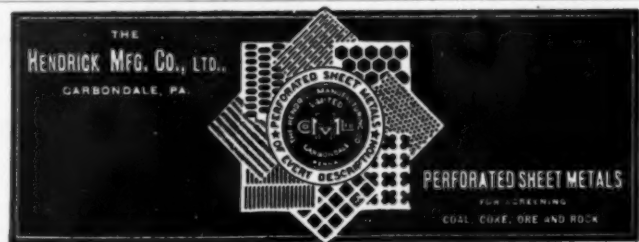
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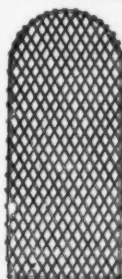
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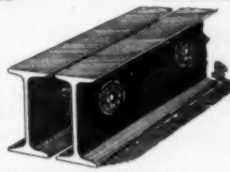
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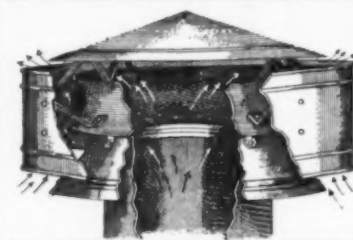
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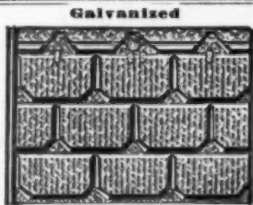
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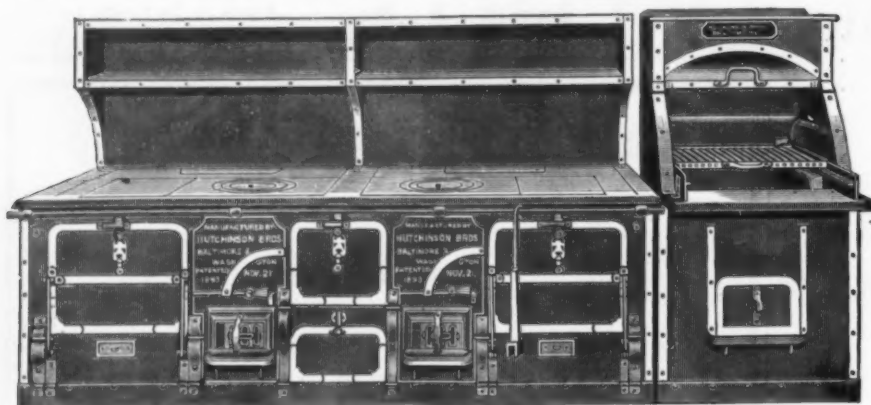
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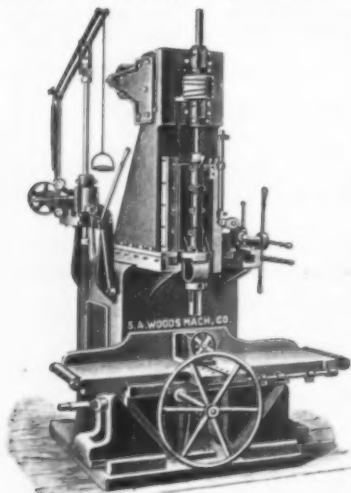
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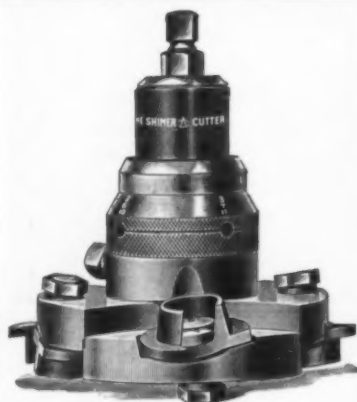
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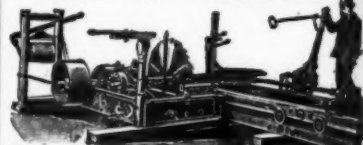
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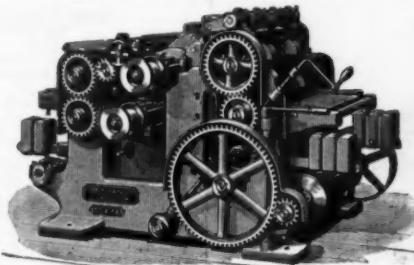
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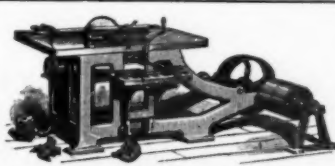
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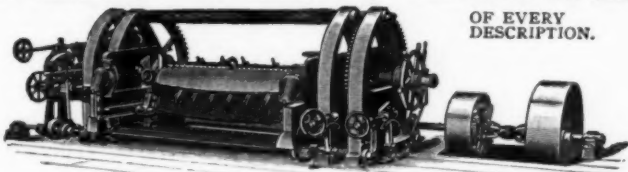
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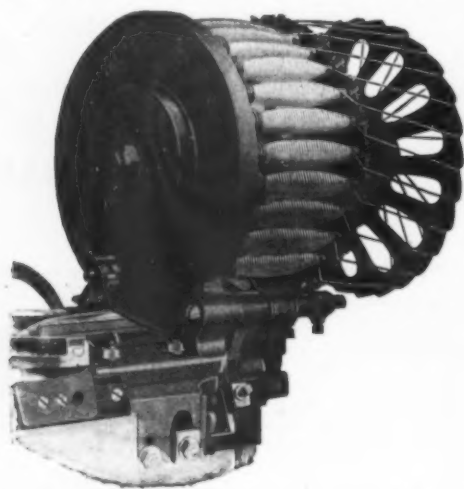
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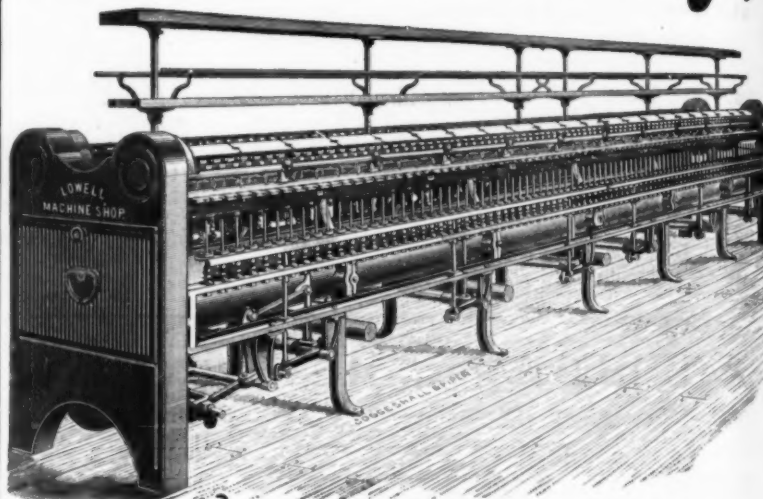
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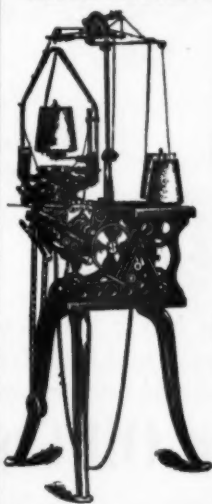
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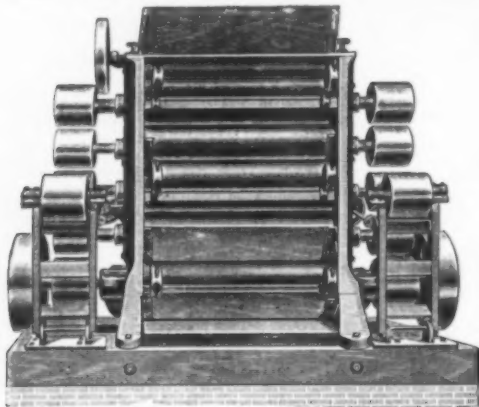
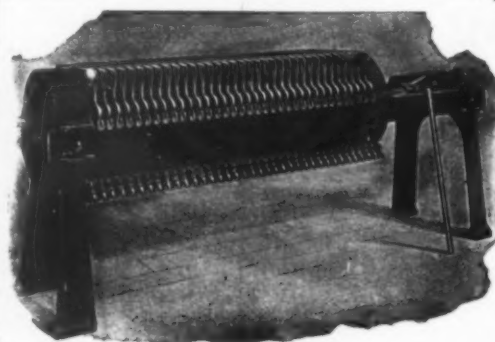
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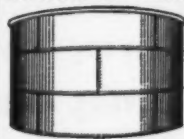
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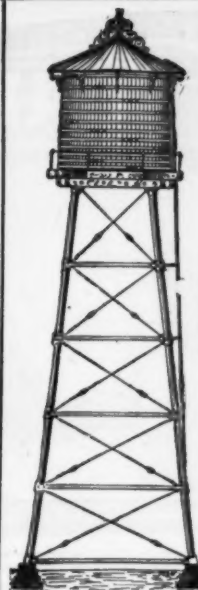
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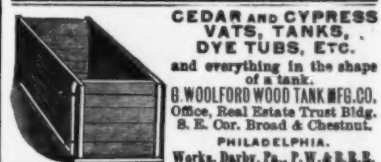
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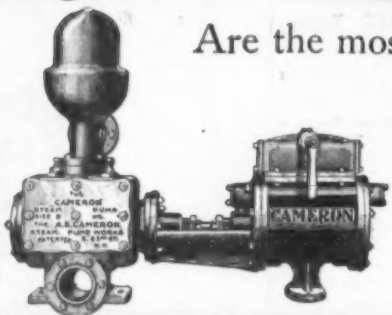
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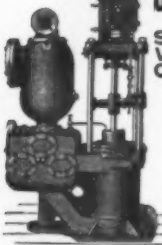
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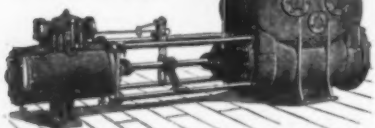
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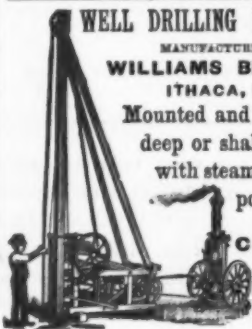
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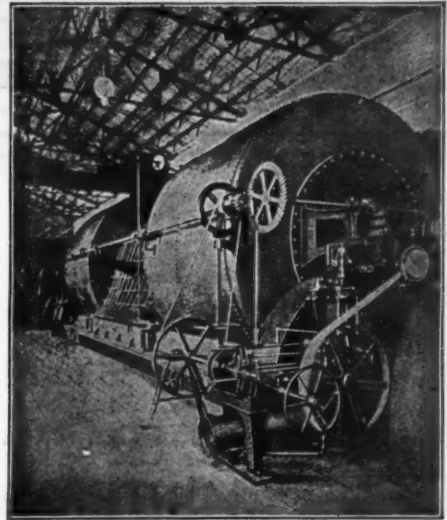
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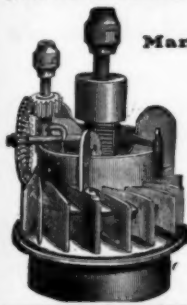
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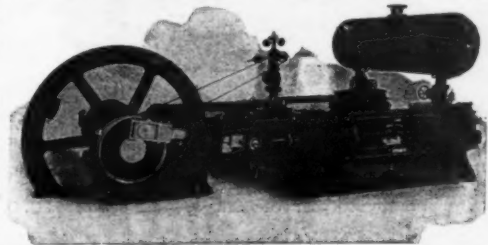
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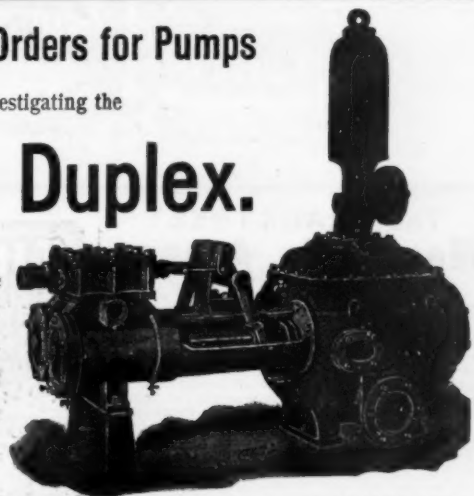
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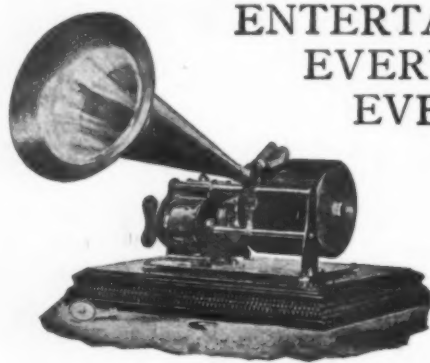
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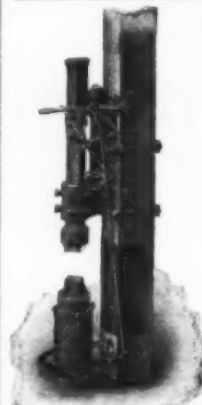


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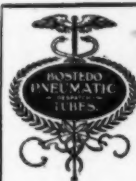
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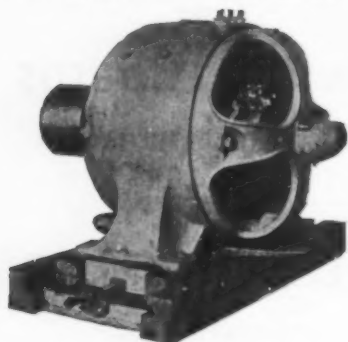
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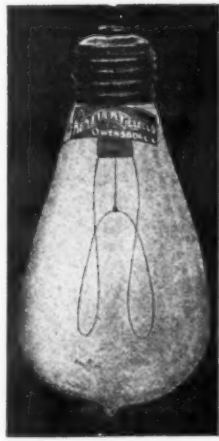
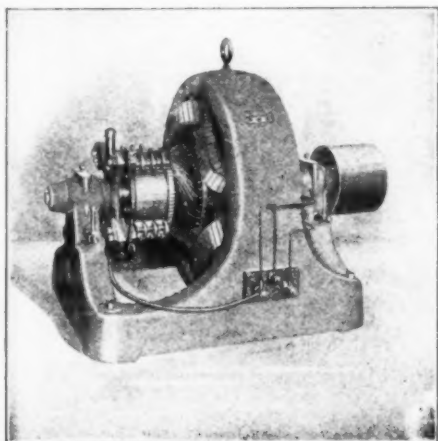
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A Page From Our Catalogue of ALL THINGS ELECTRICAL

Electrical Material Company, Baltimore.

181

MEDICAL APPARATUS.

No. 41.



No. 41.

This Electro-Medical Apparatus
is operated by one cell of dry battery,
thus dispensing with acids, chemicals
or liquids.

For doctor or patient this apparatus
is the most convenient and reliable.

The entire absence of acids, liquids
or salts will be appreciated by anyone
who ever had occasion to use a medical
battery. The strength of the various
currents range from those which are
so mild to the most powerful that can
be endured by a strong man.

All metal parts are nickel plated,
finely finished case, two conducting
cords, two nickel plated electrodes, one
rosewood handle, one sponge holder,
one foot plate with each apparatus.

No. 41 Medical Apparatus, com-
plete..... \$6.00

Extra Dry Battery for above,
each..... .50

The Shocko.

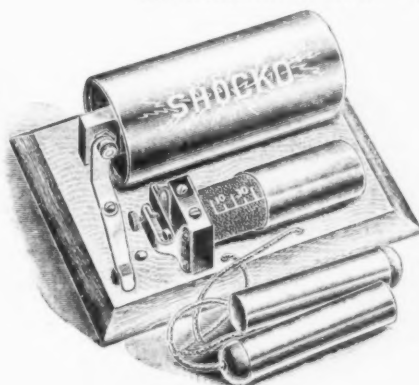
To manufacture a coil so perfect and
complete at this price has seemed
impossible, but with perseverance,
facilities and quantities have suc-
ceeded. The full current is overpower-
ing, but can be regulated so that it will
not harm the smallest child.

The application of medical coils in
cases of nervous disorders, rheuma-
tism, etc., are well known.

Shocko is especially made for use in
these and kindred diseases, and easily
manipulated by the patient at home
without assistance by following direc-
tions. The mountings are finished in
heavy nickel plate, has starting switch,
vibrator fitted with adjusting thumb
screw and silver contact points.

Price complete (by mail in U. S.,
25c. additional)..... \$1.00

Extra No. 3 coil (by mail in U. S.,
15c. additional)..... .25



The Shocko, Jr.

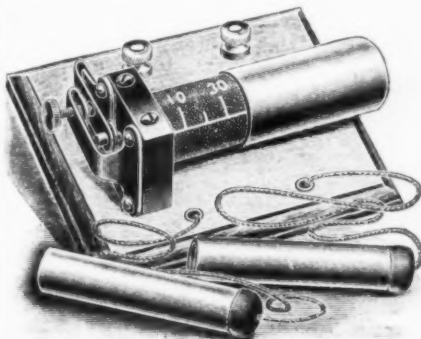
Is a complete medical coil, mounted
on a polished base, metal parts nickel
and all the features of a more expen-
sive machine.

The full current will make a strong
man dance or can be regulated at will
so a child can hardly feel it.

In its scientific, instructive and
experimental demonstrations is enter-
taining and many tricks can be sprung
on a group that will create roars of
laughter.

In cases of nervous disorders, rheu-
matism, gout, etc., is easily applied by
the patient at home without assistance.

Any dry or liquid cell that will
operate any coil will operate Shocko, Jr.
Price (by mail in U. S., 10c. addi-
tional)..... \$0.75
Dry Cell No. 3 if desired (by mail
in U. S., 15c. additional)..... .25



Special prices quoted and catalogue mailed upon request.

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Electric and Combina-
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of Every Description.

Electrical Railway Supplies,
Telephones, Switchboards

and All Accessories, Annunciators,
Bells, Pushes and
General House Goods Supplies.

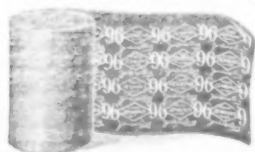
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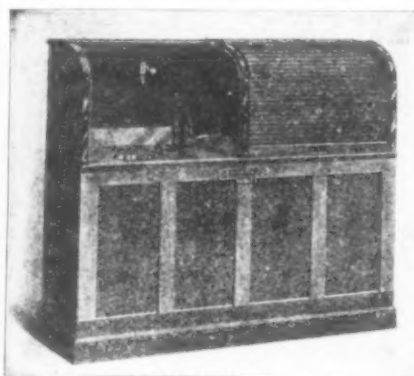
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1000 PLANTS PROVE IT. OUR FREE CATALOGUE SHOWS WHY.
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MFG. BY THE ALLINGTON & CURTIS MFG. CO.
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 may be adjusted to fill any ordinary oil can or "oilier" at one stroke. We build a dozen styles of Shop Cabinets. Catalog "S" tells about them. It's FREE.
 S. F. BOWSER & CO., Fort Wayne, Ind.

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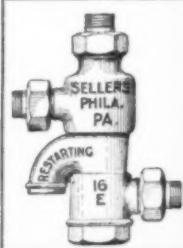
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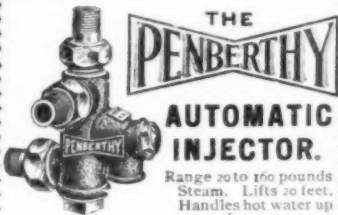
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